

ILLICIT TOBACCO: POLICY RESPONSES, CONSUMPTION AND ATTITUDES

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DECLARATION

The work presented in this thesis was carried out at the Department of Epidemiology and Public Health, University College London, under the supervision of Dr Andy McEwen and Professor Ann McNeill. This work was funded by the Cancer Research UK Lynn MacFayden Studentship in Tobacco Control. However the studies reported in Chapter 9 and 10 relied heavily on data from the Smoking Toolkit Study which is sponsored by Cancer Research UK and the Department of Health, under the directorship of Professor Robert West at UCL. Findings from Chapter Five, with revisions, is under review for publication (McNeill, A., Iringe-Koko, B., Bains, M., Bauld, L., Siggens, G., and Russell, A.). Findings from Chapter Six, Eight and Nine, with revisions, is also under review for publication (Iringe-Koko, B., McNeill, A., Joossens, L., West, R., Brown, J., Dockrell, M., Rutter, A., and McEwen, A.). Chapters Five, Six, Seven and Ten have been presented at the Society for Research on Nicotine and Tobacco – European Conference (2010, 2012), the UK National Smoking Cessation Conference (2010, 2011, 2013) and the UK Centre for Tobacco Control Studies Conference (2012).

I am responsible for writing all parts of this thesis and for some of the design, data coding, analysis and interpretation of the studies reported herein. This thesis represents my own work and all collaborations with others have been acknowledged as above, where co-authors have been noted. The concept of this PhD research was developed by a group of experts in Tobacco Control; including the research supervisors, Luk Joossens, Ailsa Rutter and Martin Dockrell. Further collaborations include Dr Eleni Vangeli who assisted with the development of the interview topic guide for the North of England key stakeholders qualitative study and Dr Emma Beard who acted as a second coder for both qualitative studies. Dr Jenny Fidler and Dr Jamie Brown who gave valuable advice on the Smoking Toolkit Study and statistical analyses and Professor Robert West, who provided input in

certain data interpretation, ensuring that they were of publishable quality. All other support is presented in the acknowledgements.

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ABSTRACT

The existence of the illicit tobacco trade has serious implications for tobacco control efforts as it encourages smoking by providing tobacco products at a cheaper price. Although this illicit trade has serious ramifications for public health in England, there is very limited data on its nature, the extent of its use and smokers' views on illicit tobacco. This thesis aimed to address this by utilising a mixed methodology approach which consisted of population based surveys of English smokers and in-depth face-to-face interviews with smokers. Prevalence of illicit tobacco use appeared to decrease between 2007-8 and 2012, but there was an increase from 2010-11 to 2012. 'Under the counter' tobacco purchases in retail shops emerged as a prominent source of illicit tobacco, although smokers were able to access a number of illicit sources. Smokers who exclusively purchased illicit tobacco paid much less for their tobacco products compared with those who reported exclusive duty-paid tobacco purchases. Report of illicit tobacco use was more likely in younger smokers, males, smokers in low socio-economic groups, smokers of 'roll your own' tobacco and those with high tobacco dependence in 2012. However, this changed with each survey, as illicit tobacco use appeared to become more widespread across socio-demographic sub-groups. Illicit tobacco users reported lower levels of motivated to quit smoking. However, smokers in the interview study reported that loss of access to illicit tobacco would drive them to think about quitting or cutting down on their smoking. The interview study revealed that smokers were able to easily access illicit tobacco in their communities and social circles. In addition, smokers viewed the illicit tobacco market and illicit traders approvingly as providing a means of accessing affordable tobacco products. Furthermore, they were unperturbed by the illegality and associated criminality of illicit tobacco trade. Due to the nature of this illegal activity, further research should investigate how the illicit tobacco market evolves in response to policy efforts.

To my Mum, Theresa, and to my Family and Friends

Take delight in the Lord, and He will give you the desires of your heart

- Psalm 37:4

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PREFACE

Illicit tobacco is a major concern in the UK with latest figures from Her Majesty's Revenue and Customs (HMRC) indicating that a substantial amount of cigarettes and roll your own tobacco is illicit. Since the first comprehensive strategy to combat illicit tobacco trade in 2000, the UK government has implemented various strategies to curb the purchase of illicit tobacco products. These strategies have mainly focused on curbing the supply of illicit tobacco and have been effective to some extent; as evident in the increased number of seizures by HMRC and continual decline in the illicit market share during this time. However, the implication of these policies to tackle illicit tobacco trade for current smokers was still unknown. If further strides are to be made in reducing not only the supply but the demand for illicit tobacco, a greater understanding of this purchasing culture is required.

This thesis attempted to do this by undertaking research using a mixed methodology approach: 1) population-based surveys of English smokers to assess a) the prevalence of illicit tobacco use in England at varying time-points, b) the socio-demographic and smoking characteristics associated with illicit tobacco use, c) the price reportedly paid for illicit as well as licit cigarettes and tobacco in England at varying time points; 2) an interview based study to better understand purchasers' knowledge of and attitude towards illicit tobacco. In addition, an interview study based on a regional response to illicit tobacco trade in the form of the North of England Programme was conducted to gain an understanding on the implementation of illicit tobacco policies at the grass root level.

Study 1 (Chapter 5) sought to explore the expectations and understanding of the Programme's key stakeholders by investigating stakeholders' prior involvement with,

and amount of time currently spent on, illicit tobacco; expected impact, and anticipated problems, of the Programme at the beginning of stakeholder involvement; the reasons for stakeholders becoming involved and expectations of the Programme; current knowledge of the Programme and its objectives and the role stakeholders play within it; stakeholders views on progress to date and how they think the Programme should develop. Overall, the Programme was seen as exciting and challenging, and an important vehicle for addressing illicit tobacco. Stakeholders tended to focus more on the supply issues rather than both supply and demand as outlined in the Programme's aim. The multi-agency partnership behind the Programme was viewed as having great potential to tackle the issues raised by illicit tobacco. Stakeholders raised concerns about the lack of trust at the time of the study between the different agencies, their different philosophies and ways of working, which could hinder further progress.

Study 2 (Chapter 6) aimed to explore the self-reported purchasing behaviour of smokers who reported illicit tobacco use in England in 2007-08 and 2010-11 using population based cross-sectional data. It sought to assess the purchasing behaviour of smokers who reported that they purchased tobacco or cigarettes from illicit sources; to determine and explore the characteristics associated with reports of illicit tobacco purchase, the number of illicit sources used, proportion of smokers' total tobacco consumption that was illicit and beliefs on the provenance of illicit tobacco. There was a decline in self reported illicit tobacco purchase from between 2007-8 and 2010-11. The majority of smokers who reported illicit tobacco purchase did this through friends. Overall, smokers who purchased illicit tobacco were more likely to be young, male, from low socio-economic groups, a 'roll your own' (RYO) smoker and with high tobacco dependence in 2007-8. However in 2010-11, only males and RYO smokers were significantly associated with illicit tobacco purchase. In 2007-8 and 2010-11, the number of illicit tobacco users reporting illicit tobacco making up more than three quarters of their total

tobacco consumption increased. A greater number of smokers in 2007-8 and 2010-11 concluded that the illicit tobacco or cigarettes they purchased were cheap because they were duty free purchased abroad or that they were smuggled and resold.

Study 3 (Chapter 7) was undertaken to gain an understanding of smokers' beliefs and views on illicit tobacco in order to better influence future policies on illicit tobacco trade. In-depth semi-structured interviews were conducted with smokers who reported regular illicit tobacco use, with the goals to determine smokers' knowledge and understanding of illicit tobacco; explore in detail smokers' sources of illicit tobacco; explore smokers' purchasing behaviours and reasons for purchasing illicit tobacco; explore smokers' attitudes towards the illicit tobacco trade (including illicit sellers).

Generally, smokers in our sample viewed the purchase of illicit tobacco as the norm. The most common source of illicit tobacco reported in this study was 'under the counter' in shops. This was a new finding as previous surveys had shown purchases from friends and trusted sources of illicit tobacco in the community as the most popular sources of illicit tobacco. Smokers viewed counterfeit tobacco negatively as poor quality with some impact on their health when smoked in the past. Smokers reported price as the main motivation for their illicit tobacco purchase. They viewed purchase of illicit tobacco as getting their cigarettes and tobacco at a bargain price. Another important finding that impacts tobacco control efforts was the report that loss of access to illicit tobacco could drive some smokers to think about quitting or cutting down on their smoking. Furthermore, when smokers in this study were asked to discuss what would prevent them from purchasing illicit tobacco, some reported the absence of illicit sellers. Another significant theme from this study was that most smokers were not bothered by the legality or morality of purchasing illicit tobacco. Smokers were generally nonchalant about being seen as partaking or encouraging in an illegal activity in their community when buying cheap tobacco from illicit sources. Furthermore, when confronted with the

claim that the illicit tobacco trade was connected to organised crime and has links to terrorism, unsurprisingly this was received with some cynicism by smokers in this sample. This study provided an insight into smokers' views on the illicit tobacco trade and new developments in smokers' purchase of illicit tobacco.

Study 4 (Chapter 8) following the finding that most smokers reported purchase of cheap illicit tobacco from under the counter in newsagents, off licences and corner shops, sought to explore this in a nationally representative survey. In addition, this study aimed to assess whether any changes in prevalence of illicit tobacco use was reflected in the attributes of those who report illicit tobacco use, including motivation and likelihood of having made a past quit attempt. Purchases from 'under the counter' in newsagents, off licences and corner shops was the most common source of illicit tobacco in 2012. Prevalence of illicit tobacco use in this study appeared to increase since the last survey in 2010-11, but a decrease from 2007-8. This increase in reported illicit tobacco use could have been as a result of the economic recession which may have caused more smokers to purchase cheaper tobacco products.

Study 5 (Chapter 9) aimed to address the limited evidence on the price smokers pay for illicit cigarettes and RYO tobacco in England. In addition, it sought to compare this with the reported price paid for 'duty-paid' cigarettes and RYO and determine any trends between 2007-8 and 2012. Duty cigarette and RYO tobacco price estimates increased over time from 2007-8 to 2012. The price estimates in this study were less than the recommended retail price of duty-paid cigarettes in the most popular price category at all time points. This could have been down to the methodology for estimating the price of cigarettes and tobacco which were subject to recall bias and under-reporting of tobacco consumption, both of which could have impacted on the price estimates derived. In addition, more smokers in our sample may have purchased 'budget' brand cigarettes

than ‘premium’ brands which was not accounted for in this study and could have resulted in a lower price estimates. Those who exclusively purchased illicit cigarettes and RYO tobacco paid less at all time points than those who purchased duty-paid products exclusively. Males, those in low socio-economic groups and those with high tobacco dependence were associated with paying lower prices for duty-paid cigarettes and RYO tobacco. In 2012 this included being an older smoker, but only for RYO tobacco price estimates. This finding identifies smokers most likely to engage in price minimising strategies to mitigate the effect of tax increases. Future research should investigate the extent of tobacco price minimising activities in English smokers in order to inform decisions on the taxation of tobacco products.

Study 6 (Chapter 10) sought to investigate the association between illicit tobacco purchase and motivation to quit and making a past quit attempt using population based cross-sectional data in 2007-8, 2010-11 and 2012. Exclusive illicit tobacco use was associated with reporting lower levels of motivation to quit. However, there appeared to be no association between illicit tobacco purchases and having made a past quit attempt. This finding has significant implications for tobacco control as it suggests that the availability of cheap sources of cigarettes and tobacco removes the financial motivation to quit smoking. Nonetheless, access to cheap cigarettes and tobacco did not appear to deter making a quit attempt, but could impact on the success of attempts made. Future research should investigate the association between access to illicit tobacco sources and likelihood of quit success.

The concept and design of Study 1 was heavily influenced by Professor Ann McNeill, Dr Andy McEwen and Professor Linda Bauld, as part of the evaluation of the North of England Illicit Tobacco Programme. The design and concept of Study 2, 3, 4 & 5 were influenced by the research supervisors (Dr Andy McEwen and Professor Ann McNeill)

and the student, with assistance from Dr Jamie Brown and Dr Emma Beard on the data collection and statistical analyses. The concept of Study 6 was conceived by Professor Robert West and the student, with the design, data collection and analyses conducted by the student. As with most PhDs, more support was required at the beginning and less input as the studentship progressed.

CHAPTER 1

GENERAL INTRODUCTION

1.1 The tobacco trade



Photo by George W. Ackerman, Courtesy National Archives, Still Pictures Collection, 16-G-294-2-1

It is supposed that tobacco (from the genus *Nicotiana*) began growing in the Americas around 6000 B.C (Pearsall 1992; Gately, 2001). It is recorded that Christopher Columbus was presented with dried tobacco leaves as a gift upon his arrival in North America and this marked the official start of tobacco history (Russo et al., 2011). By 1492 the use of tobacco was widespread throughout the American continents (Gately, 2001); mainly as snuff, pipe tobacco and cigars. However, it was only after the invention of manufactured cigarettes in the latter part of the 19th century did tobacco smoking gain real traction; probably due to its convenience (Musk et al., 2003). In fact by the late 1940s, 65% of men and 40% of women were regular cigarette smokers in Britain, whereas only 16% of men smoked other tobacco products (Royal College of Physicians, 2000). Tobacco is grown in over 125 countries, on over 4 million hectares of land (WHO, 2002).

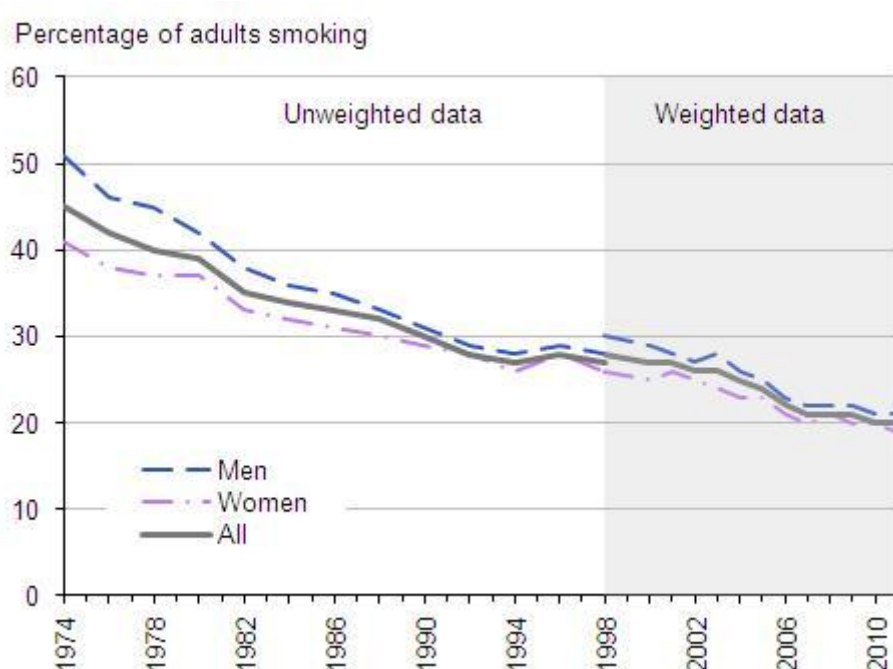
There are four dominating transnational companies engaged in the manufacture and trade of tobacco products; Philip Morris International (PMI), the British American Tobacco company (BAT), Japan Tobacco International (JTI) and Imperial Tobacco (IT) (Bialous and Peeters, 2012). PMI has become the world's largest transnational tobacco company and its Marlboro brand is the world leader (Bialous and Peeters, 2012). In 2010, the company sold almost 900 billion cigarettes, making it the tobacco company with the highest world market share at 24.4% (Bialous and Peeters, 2012). In close second was BAT with a market share of 20.5%, and with the largest network in the most countries (WHO, 2002; Bialous and Peeters, 2012). JTI and IT had market shares of 16.2% and 8.6% respectively (Bialous and Peeters, 2012). Tobacco Industry profits are believed to be approximately double those of most other companies (Gilmore et al., 2010) and there are indications that they thrive even in periods of economic recession (He and Yano, 2009).

1.2 Smoking trends

Smoked tobacco is common worldwide, with approximately 5.5 trillion cigarettes smoked annually (Proctor, 2004). Despite falling trends in tobacco use in most western countries, it continues to be the leading global cause of avoidable death (WHO, 2012). In recent years, an overwhelming majority of tobacco smokers resided in low and middle-income countries (Sorensen et al., 2005). In the UK, according to survey data from the General Lifestyle Survey (GLS) (compiled by the Office of National Statistics (ONS)) the percentage of smokers aged 16 and over has fallen significantly in the past decades, from 45% in 1974 to 20% in 2011 (ONS, 2013; Figure 1.1). In England, the most up-to-date data on smoking prevalence is provided by the Smoking Toolkit Study (STS) (a national survey of English smokers), which placed the 3-month moving average of smoking prevalence at 19.1% as of May 2013 (West and Brown, 2013). Supported by data from the GLS, this indicates that England has the lowest smoking

prevalence, compared with Wales (24%), Scotland (24%) and Northern Ireland (25%) (Department of Health, Social Services and Public Safety Northern Ireland, 2012; ONS, 2013). However, there is regional variation in smoking rates in England. For instance, the North West (21%) and Yorkshire and Humber (21%) had the highest smoking prevalence in 2011, compared with London (16%) (ONS, 2013).

Figure 1.1: Prevalence of cigarette smoking by sex in Great Britain: 1974 – 2011; *source General Lifestyle Survey*



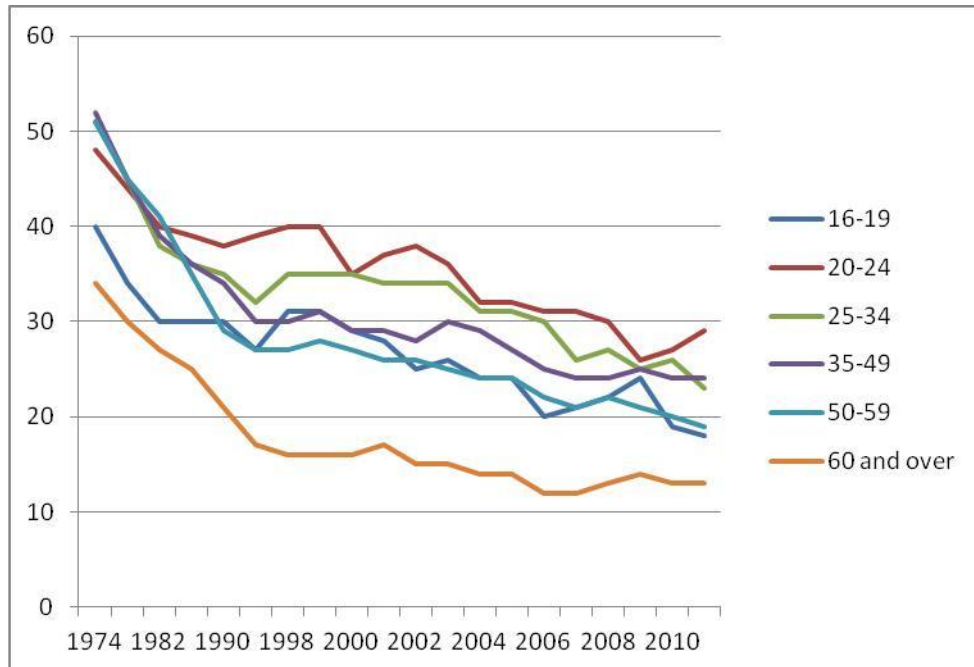
1. For 1998 unweighted and weighted data are shown for comparison purposes. Weighted data was not available before this point.
2. The survey was not run in 1997/98 or 1999/00. A linear trend has been drawn between the data point before and after these years.

1.2.1 Smoking and age

Smoking prevalence in 2011 was highest in the 20-24 age group (29%) according to survey data from the GLS, compared with the 16-19 (18%) and 60+ (13%) age groups (ONS, 2013; Figure 1.2). Between 2010 and 2011, smoking in the 20-24 age group increased from 27% to 29%, while in all other age groups the rate fell or stayed the same (ONS, 2013). In 1992, 34% of smokers reported taking up smoking before the age of 16; and this has progressively increased over the years to 40% in 2011 (ONS, 2013).

Smoking was lowest in the 60+ age group consistently over time.

Figure 1.2: Prevalence of cigarette smoking by age group in Great Britain: 1974 - 2011;
source *General Lifestyle Survey*



1. For 1998 unweighted and weighted data are shown for comparison purposes. Weighted data was not available before this point.

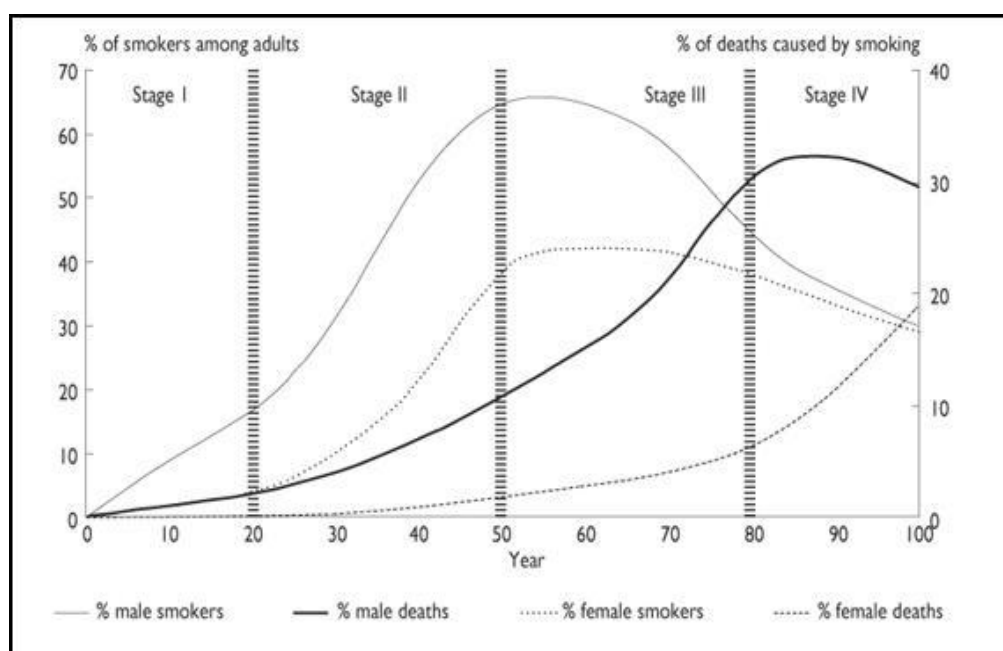
2. The survey was not run in 1997/98 or 1999/00. A linear trend has been drawn between the data point before and after these years.

1.2.2 Smoking and gender

It is estimated that nearly five times more men than women smoke worldwide (Guindon and Boisclair, 2003); but this varies between countries. In high-income countries smoking prevalence in women is nearly at the same level as men (WHO, 2008a). For example, in the UK, smoking prevalence among females was 19% in 2011 and 21% in males (ONS, 2013). Similarly, in England female smoking prevalence was 18% in men and 20% in women (ONS, 2013). However, in low- and middle-income countries fewer women smoke than men (WHO, 2008a). Approximately 35% of men in developed countries and 50% in developing countries smoke (Mackay et al., 2006), whereas, about 22% of women in developed countries and 9% in developing countries smoke (Mackay et al., 2006).

Although women's smoking prevalence rates are lower than men's, they are predicted to rise in many low- and- middle-income countries. According to Lopez and colleagues' descriptive model of the tobacco epidemic, female-to-male ratio of smoking prevalence is expected to rise in many low- and- middle-income countries (Lopez et al., 1994; Figure 1.3). Moreover, survey data show that worldwide smoking rates among boys and girls mirror each other more than smoking rates among adult women and men, with boys between the ages of 13 and 15 years smoking only 2 to 3 times more than girls (Warren et al., 2006).

Figure 1.3: The four-stage evolution of the smoking epidemic (Lopez et al., 1994)



Note: Stage I – Sub-Saharan Africa; Stage II – China, Japan, South East Asia, Latin America, North Africa; Stage III – Eastern Europe, Southern Europe, Latin America; Stage IV – Western Europe, North America, Australia

1.2.3 Smoking and socio-economic status

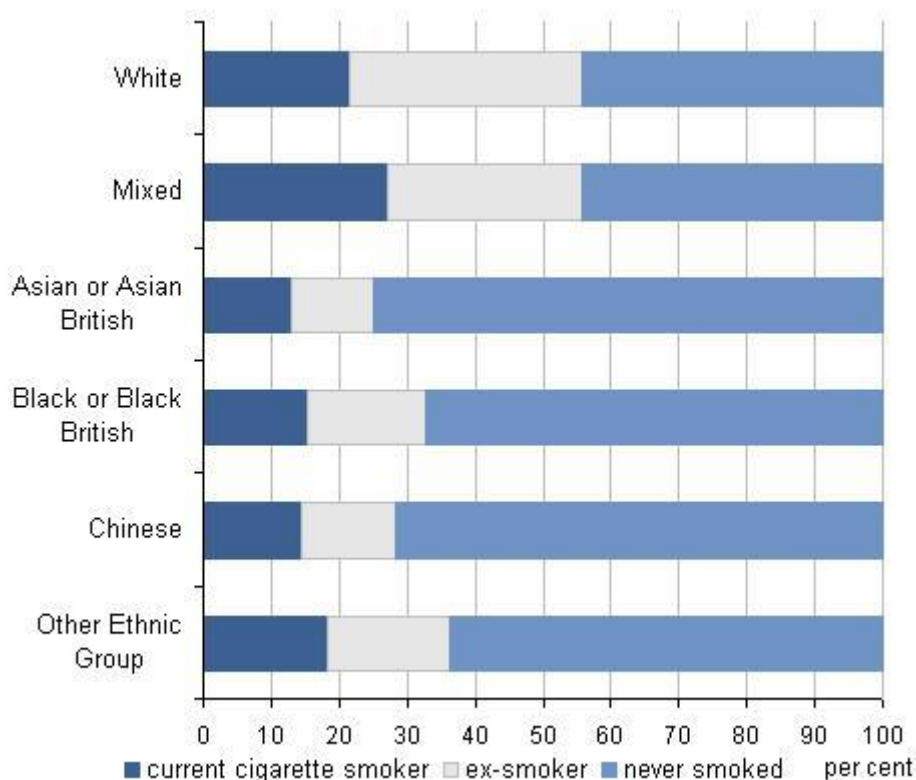
There is extensive research which shows that globally lower socio-economic-status (SES) groups typically have higher smoking rates than more advantaged group (Marcus et al., 1989; Cavelaars et al., 2000; Bobak et al., 2000; Pampel, 2008; Barnett et al., 2009) and are much more likely to die from smoking related illnesses (Jha et al., 2006;

David et al., 2010). In the UK, smoking rates are highest in routine and manual socio-economic groups (28%); compared with managerial and professional (13%) and intermediate groups (20%) (ONS, 2013). Smokers in routine and manual socio-economic groups also smoked on average greater number of cigarettes a day, compared to their more affluent counterparts (ONS, 2013). Smokers in economically disadvantaged groups show higher levels of dependence (Fidler et al., 2008).

Although smoking cessation support is widely available in most parts of the world, and countries like the United Kingdom have successfully targeted low SES groups (Chesterman et al., 2005), disadvantaged smokers are less likely to quit successfully (Kotz and West, 2009; David et al., 2010; Reid et al.; 2010). The psychosocial triggers of cessation that may differ by SES have been explored and include lack of support, greater addiction to tobacco, lower motivation to quit, lower adherence to treatment, life stress, differences in cognition and perception and varied impact of tobacco industry marketing (Kunst et al., 2004; Vangeli and West, 2008; Hiscock et al., 2011; Bryant et al., 2011).

1.2.4 Smoking and ethnicity According to data from the Integrated Household Survey produced by the ONS, people of Mixed ethnicity (27%) and those of White ethnicity (22%) were more likely to be current smokers in 2011, compared with 15% of people from Black/Black British and 13% from Asian/Asian British ethnic groups (ONS, 2011; Figure 1.4). There also appear to be ethnic differences in smoking initiation and progression to regular tobacco use, with white adolescents being most likely to become regular smokers compared with those from Asian, Hispanic or Black backgrounds (Kandel et al., 2004).

Figure 1.4: Smoking prevalence by ethnicity, April 2010 to March 2011; *source Integrated Household Survey*



1.3 Smoking and health

A telling statement often made by tobacco control advocates is that “*tobacco is the only legal consumer product which kills when used as intended*”. The use of tobacco products contributes to an estimated 6 million deaths of those over age 30 (WHO, 2012). It accounts for more deaths than alcohol abuse, road accidents, other accidents and falls, preventable diabetes, suicide and drug use put together (Department of Health (DH), 2011). Smoking also reduces a smoker’s life expectancy by an average of 10 years (Doll et al., 2004). This is unsurprising when it is estimated that there are over 599 additives in tobacco products, which produce a further 3000-4000 chemical compounds when lit (United States Department of Health and Human Services (USDHHS), 1994). These 599 plus compounds are highly carcinogenic. The causal link between lung cancer and tobacco smoking was first established in the 1950s (Mills and Porter, 1950;

Doll and Hill, 1950; Levin et al., 1950; Schrek et al., 1950; Wynder and Graham, 1950); although a rising incidence of lung cancer was first observed in the 1920s and 1930s by pathologists and other medical practitioners (Winstanley et al., 1995; White 1990). In 1962 the Royal College of Physicians concluded that there was a causal relationship between smoking and lung cancer (Royal College of Physicians, 1962). Smoking is also linked to large number of cancers other than lung cancer, such as: bladder, kidney, larynx, oral cavity, oesophagus and pancreas (Jacobs et al., 1999; Brennan et al., 2000). Smoking attributable morbidity includes: the risk of cardiovascular diseases and chronic obstructive pulmonary disease (which incorporates emphysema and chronic bronchitis) (Cornfield et al., 2009; Yoshida & Tuder, 2007).

Smoking not only has negative health effects on its users but also on non-smokers who ‘passively’ inhale cigarette smoke, both side-stream and exhaled. Exposure to this second-hand smoke (SHS) has been linked to a raised risk of lung cancer (Taylor et al., 2007) and is believed to contribute to deaths from lower respiratory infections, asthma and ischaemic disease (Oberg et al., 2010). In addition, foeti exposure to SHS through smoking during pregnancy results in various perinatal complications (Andres and Day, 2000) and impacts on foetal growth (Salihu and Wilson, 2007).

1.4 Smoking cessation

The health benefits of stopping smoking are substantial (USDHHS, 1990; Fiore and Baker, 2013). Within a few years of cessation, the risk of contracting lung cancer is halved (Peto et al., 2000). In England there is a comprehensive national network of stop-smoking services that provide a combination of medication and behavioural support are among the best-value life-preserving interventions in the UK National Health Service (National Institute for Health and Care Excellence (NICE), 2008). Since 2000, over two million people have achieved validated abstinence from smoking at four weeks (The

1.4.1 Cessation medications

Without treatment only ~5% of smokers who try to quit achieve long-term abstinence, but evidence-based cessation treatments increases this figure to 10% - 30% (Schlam and Baker, 2013). There are a number of effective smoking cessation pharmacotherapies available to smokers who decide to quit smoking. Nicotine Replacement Therapy (NRT) i.e. gum, transdermal patch, nasal spray, inhalator, lozenge, mouth spray and sublingual tablet, are effective smoking cessation aids (Silagy et al., 2004; Stead et al. 2008). Bupropion (an antidepressant), Clonidine (an antihypertensive not currently licensed for use in the UK) and Varenicline (a selective nicotinic receptor partial agonist) have also been found effective in aiding smoking cessation (Gourlay et al., 2008; Hughes et al., 2007; Cahill et al., 2012). However, smokers who use combination NRT (two or more products) or varenicline appear to have a better chance of success than those being treated in primary care with one-to-one support and use of single NRT (Brose et al., 2011).

1.4.2 Behavioural interventions

Intensive behavioural support delivered by appropriately trained smoking cessation counsellors is seen as the most effective non-pharmacological intervention for smokers who are strongly motivated to quit (Coleman, 2004). Group support in particular has been found to be effective in helping people stop smoking compared with self help, one-to-one support and drop in clinics (Odds ratio (OR) = 1.46, 95% Confidence Interval (CI) 1.19 – 1.78) (Brose et al., 2011) or no support (OR = 2.17 CI 1.37 – 3.45) (Stead and Lancaster, 2009). There is good evidence that combination of pharmacological and non-pharmacological interventions increase smoking cessation success compared to minimal intervention or usual care (Risk ratio = 1.82 CI 1.66 - 2.00) (Stead and

Lancaster, 2012).

In addition to medications and behavioural support; internet based interventions, quit lines, brief GP advice and mass media campaigns have been found effective to some extent in aiding smoking cessation (Shahab and McEwen, 2009; Stead et al., 2009; West et al., 2000; Reid, 1996).

1.4.3 Harm reduction

There is the acknowledgement that there are smokers who, for whatever reason, are not interested in or are unable to quit smoking. In 2007, the Royal College of Physicians (RCP) published the report '*Harm Reduction in Nicotine Addiction: Helping People who Can't Quit*', highlighting the need to consider effective harm reduction principles in tobacco control to assist such individuals (RCP, 2007). By 2010, the UK government backed a harm reduction approach to tobacco control in the publication - '*A Smokefree Future*' (DH, 2010). The most common harm reduction approach is smoking reduction (commonly known as 'cutting down'). Since the risks of smoking are dose-related (Jacobs et al., 1999), there is a rationale for promoting smoking reduction in smokers who are unwilling or unable to quit smoking as health benefits may be incurred in doing so. For instance, there is evidence that reducing the number of cigarettes smoked by 62% reduces the risk of lung cancer by 27% (Hazard ratio = 0.73 CI 0.54 – 0.98) (Godtfredsen et al., 2005). Harm reduction has also been suggested as a strategy for smokers in lower socio-economic groups as a means of reducing the social inequalities in smoking cessation (Siahpush et al., 2006). The NICE guidance on harm reduction was released in June 2013 and provides comprehensive guidelines on use of harm reduction in smoking cessation (NICE, 2013).

1.5 Tobacco control

Tobacco control interventions can be divided into those aimed at tackling demand for tobacco and those aimed at the supply of tobacco products.

1.5.1 Approaches aimed at demand reduction

1.5.1.1 Tax policy

Tobacco is considered a demerit good as it is unhealthy, degrading, or otherwise socially undesirable due to the perceived negative effects on the consumers (Cameron et al., 2011). If left to market forces it is over-consumed, therefore the standard economic policy solution is to levy taxes on such goods (Cameron et al., 2011). Raising tobacco taxes (above the rate of inflation) is the single most effective policy at a population level to encourage smokers to quit (it has been estimated that a 10% increase over the average tobacco price could lead to 40 million people worldwide quitting smoking) (Jha and Chaloupka, 1999). Modest price increases were found to help prevent relapse and discourage initiation of smoking (Jha and Chaloupka, 1999). This has been supported by reviews of various studies from high and low income countries, indicating that higher tobacco prices significantly reduce tobacco use (Chaloupka and Warner, 2000; Gallet and List, 2003). When asked what triggered their latest attempt to quit, low SES smokers were more likely to cite the cost of smoking compared to high SES smokers (Vangeli and West 2008, Pisinger et al., 2011).

1.5.1.2 Smoking restrictions

Restricting tobacco use in the workplace (Brownson et al., 2002; Fichtenberg and Glantz, 2002; Heloma and Jaakkola, 2003), homes (Farkas et al., 1999; Shopland et al., 2006) and in public places (Bauld, 2011) results in smoking fewer cigarettes a day, increased likelihood of considering quitting, higher rates of cessation attempts, and increased rates of quitting. In the UK, presently there is a complete smoking ban in

public places, including workplaces and schools which came into force on 1 July 2007. In England the smoke-free legislation was associated with an increase in the percentage of smokers attempting to quit (Hackshaw et al., 2010).

1.5.1.3 Advertising bans

Comprehensive advertising bans are second only to price policies in their impact on adult smoking (Schaap et al., 2008; Levy et al., 2008). Since 2003 most forms of tobacco advertising and promotion have been banned in the UK; including most recently, the ban on Point of Sale displays (POS) in large stores from April 2012 and small stores from April 2015 (UK Parliament, 2010). The ban of POS displays was significant as it has been associated with increased smoking uptake in youth (Paynter and Edwards, 2009), impulse buying of tobacco products (Wakefield et al., 2008; Carter et al., 2009), undermining intention to quit (Germain et al., 2010) and enables the promotion of price discounts (Spanopoulos et al., 2012). An evaluation of the POS display ban in Ireland found that there was an immediate impact on young people's attitudes towards smoking (McNeill et al., 2011).

1.5.1.4 Graphic health warnings

Smokers tend to underestimate the full extent of the risks to themselves and to others of tobacco use, despite clear evidence about its dangers of (Hammond et al., 2006). Many smokers are unaware that smoking causes cancers (other than lung cancer), heart disease, stroke and many other diseases (Siahpush et al., 2006; Hammond et al., 2006). Effective health warnings increase smokers' awareness of health risks (Hammond et al., 2006) and increase the chances that they will think about cessation and reduce tobacco consumption (Borland, 1997; Fathelrahman et al., 2009). Moreover, they reduce the marketing effect of tobacco product packaging, making it more difficult for tobacco companies to reinforce brand awareness (WHO, 2011).

1.5.1.5 Standardised tobacco packaging

Due to traditional marketing avenues for tobacco products becoming increasingly restricted as a result of wider acceptance of bans on tobacco advertising, promotion and sponsorship, the tobacco industry has become increasingly dependent on cigarette packaging as a primary marketing medium (Difranza et al., 2002; Freeman et al., 2008). Removing this main source of promotion through the use of generic (“standardized”) packaging would further decrease the marketing impact of the tobacco industry. This style of packaging would use only standard type fonts in a single colour on a plain background to provide the minimum information necessary to identify a product, restricting the use of logos, stylized fonts, colours, designs or images, or any additional descriptive language (WHO, 2011). There is evidence that the plainer the package and the fewer branding elements included, the less favourably smokers perceive the packs and the greater the impact pictorial health warnings may have (Wakefield et al., 2008; Germain et al., 2010). Furthermore, it may increase accurate perceptions of the risk of tobacco use and therefore decrease smoking rates (Freeman et al., 2008; Moodie et al., 2011). A systematic review on standardised packaging concluded that it reduces the attractiveness and appeal of tobacco products, increases the effectiveness of health warnings and reduces use of designs to mislead smokers about the harmfulness of tobacco products (Moodie et al., 2012a). Tobacco control experts estimate that standardised packaging is likely to lead to a decline in smoking prevalence, particularly smoking uptake by youths (Pechey et al., 2013).

In December 2012, Australia became the first country to implement a bill that mandates generic tobacco packaging (Australian Office of Parliamentary Counsel, 2012). It requires tobacco products to be sold in a standardized drab, dark brown packaging with large graphic health warnings, with no tobacco industry logos, brand imagery, colours or promotional text. The brand and product names are printed in the same small font below

hard-hitting warnings depicting the health consequences of smoking. In the UK, a consultation on standardised packaging was held between April and August 2012 and is at present under consideration by the Ministers of Parliament.

1.5.2 Approaches aimed at supply reduction

Reducing the availability of tobacco products and regulating supply is one method of curbing the tobacco epidemic. It has been proposed that crop substitution and diversification programs be implemented as a means of reducing the supply of tobacco. However there is not much evidence that such programs would significantly reduce the supply of tobacco, given that the incentives for growing tobacco tend to attract new farmers who would replace those who abandon tobacco farming (Jacobs et al. 2000). The key intervention on the supply side is the control of the illicit tobacco trade and is one of the core supply reduction provisions in the WHO Framework Convention on Tobacco Control (WHO FCTC, 2013). Consequently, several governments are adopting policies aimed at controlling smuggling. There is, however, little evidence that interventions aimed at reducing the supply of tobacco products are as effective in reducing cigarette smoking compared to the effectiveness of demand-side interventions (WHO, 1997; Jha and Chaloupka, 1999; Jha and Chaloupka, 2000a).

1.6 The importance of addressing illicit tobacco trade

Increasing the price of tobacco in real terms (i.e. above the rate of inflation) can have a significant impact upon smoking consumption and is recognised as the most effective way to encourage smokers to quit, help prevent relapse and discourage initiation (Arnott et al., 2008). A counter effect of this strategy is the existence of illicit tobacco trade which supplies cheaper tobacco products. In effect, smokers can therefore alleviate the effects of tax increases on tobacco products by ‘down-trading’ to smuggled, bootlegged or counterfeit tobacco products. Widespread use of illicit tobacco poses a serious threat

to the aforementioned tobacco control efforts as it could conceivably contribute towards making it easier for current smokers to continue and encourage others to take up smoking. Additionally, it contributes towards the shift in cultural norms that makes smoking more socially acceptable. It is important that governments aim for the complete elimination of the illicit trade in tobacco products – whether this is plausible or not. It is claimed that the absence of this illegal trade would result in many lives saved as smokers would be forced to quit smoking when faced with high tobacco prices (West et al., 2008). It was evident in the development of the WHO FCTC Illicit Tobacco Protocol that there is an international commitment to reducing the demand and availability of illicit tobacco products. Indeed, there is also commitment by the UK Government to tackle illicit tobacco trade and various strategies have been implemented over the past decade (explored in Chapter 3). Although some progress has been made in reducing the supply of illicit tobacco in the UK, there is still more to be done if this illegal trade is to be effectively eliminated. Monitoring the illicit tobacco trade by quantifying the amount of ‘non-duty’ paid tobacco products is one of the tools used in addressing illicit tobacco trade. This may contribute to assessing the effectiveness of strategies implemented to reduce the illicit tobacco market share. However, in order to achieve real success in the fight against illicit tobacco use a greater understanding of the nature and extent of this purchasing culture is essential.

There is limited research on illicit tobacco use in England; especially from the perspective of the individual smoker. There still remain a number of questions with regards to the illicit tobacco trade in England. For instance 1) What are the most likely sources used to obtain illicit tobacco?; 2) What is the prevalence of reported illicit tobacco use?; 3) Who is likely to report illicit tobacco use?; 4) How cheaply can illicit tobacco products be obtained?; 5) What are the views and beliefs of those who partake in this purchasing behaviour and 6) Does engaging in this behaviour undermine smoking

cessation efforts?

1.7 Aims and objectives of the current thesis

The overall aim of this thesis is to explore the nature and extent of illicit tobacco use in England, focusing more intently on the experiences of smokers engaged in this activity.

The objectives of the current thesis were as follows:

1. To assess the involvement and expectations of key stakeholders in a unique cross-agency Programme aimed at tackling the supply and demand for illicit tobacco in the North of England.
2. To determine the prevalence of illicit tobacco use, sources of purchase, proportion of smokers' total tobacco consumption which is illicit, and beliefs on the provenance of illicit tobacco in England in 2007-8 and 2010-11 and a follow-up in 2012.
3. To identify those most likely to report purchase and use of illicit tobacco, by assessing the associations with:
 - i. Age
 - ii. Gender
 - iii. Socio-economic status
 - iv. Tobacco dependence
4. To determine smokers' understanding, beliefs and views on the illicit tobacco trade.
5. To investigate price paid for duty-paid and illicit tobacco and cigarettes in England
6. To determine whether smokers who report illicit tobacco use are less likely to engage in smoking cessation by assessing the associations with:
 - i. Motivation to quit
 - ii. Past quit attempt

CHAPTER 2

THE ILLICIT TOBACCO TRADE

2.1 Introduction

Illicit tobacco describes tobacco products purchased cheaply through tax evasion (smuggled, bootlegged and counterfeit tobacco). It is estimated that the illicit cigarette market accounts for 11.6% of global cigarette consumption, which amounts to 657 billion cigarettes a year (Joossens et al., 2010). It costs governments worldwide a loss of \$40.5 billion annually in revenue (Joossens et al., 2010), reducing the amount of money available to governments for state-funded health care (Arnott et al., 2008).

As the use of tobacco products increases globally - despite a continuous decline in high-income countries, contributing to an estimated 5.4 million deaths each year (World Health Organisation (WHO), 2011), the impact of the illicit tobacco trade has become a critical public health issue. The availability of cheap illicit tobacco encourages higher smoking rates, increasing the burden of disease caused by tobacco use (Joossens et al., 1999). It can jeopardise a smoker's quit attempt (resulting in relapse) and encourage the initiation of smoking (usually in young people) as it is easily affordable at almost 50% cheaper than legitimate tobacco in the UK (West et al., 2008). In addition, studies show that smokers from low socio-economic groups are more likely to buy cheap illicit tobacco as it is affordable and sustains their smoking behaviour (Tsai et al., 2003; Lee and Chen, 2006; Taylor et al., 2005; Shelley et al., 2007, Wiltshire et al., 2001). Consequently, the illicit tobacco trade poses an additional threat to public health as it deepens existing health inequalities.

Tax increases (above the rate of inflation) are the single most effective policy at a

population level to encourage smokers to quit (Chaloupka et al., 2012). It has been estimated that a 10% increase in the average tobacco price would reduce smoking by approximately 4% in high income countries and 8% in low and middle income countries (Jha and Chaloupka, 2000b). There is evidence from high-income and low-income countries that higher tobacco prices significantly reduce tobacco use (Chaloupka and Warner, 2000; Gallet and List, 2003). In addition, modest price increases are found to help prevent relapse and discourage the initiation of smoking (Jha and Chaloupka, 1999). The positive effect of the aforementioned high taxes on decreasing smoking prevalence is undermined by the existence of the illicit tobacco trade which makes it possible for smokers to purchase their tobacco more cheaply. In addition it undermines other tobacco control policies aimed at restricting access such as raising the age of sale and the ban of tobacco sales from vending machines by providing an unregulated source of tobacco for young smokers (NEMS, 2009).

The illicit trade of tobacco products affects all countries economically through lost revenue and increased burden on healthcare services, in spite of their level of development, including the United States, the UK and China the world's biggest tobacco market (Joossens and Raw, 2000; Lee and Collin, 2006). This chapter gives an overview of the definition and nature of the illicit tobacco market.

2.2 Defining illicit tobacco

Under Article 1 of the WHO Framework Convention on Tobacco Control (FCTC) illicit trade is defined as "any practice or conduct prohibited by law and which relates to production, shipment, receipt, possession, distribution, sale or purchase including any practice or conduct intended to facilitate such activity" (WHO, 2003). Others describe the illicit tobacco trade as assuming various forms, including illegal circumvention or cigarette smuggling through either large-scale smuggling or bootlegging (Joossens et al.,

2000). Large scale smugglers illegally export and re-import legitimately manufactured tobacco products. Bootleggers purchase duty-paid tobacco products in a low tax jurisdiction, and illegally resell them in a high tax jurisdiction paying no local revenue tax (Joossens et al., 2000; Chief Medical Officer (CMO), 2004; Hornsby and Hobbs, 2007). As well as smuggling, another form of the illicit tobacco trade involves counterfeit tobacco illegally manufactured and passed off as legitimate existing tobacco products. In recent years there has been the emergence of other forms of illicit tobacco such as "cheap whites" (tobacco products manufactured legally for the sole purpose of being sold in the illicit market). These categories of illicit tobacco are described further below.

2.2.1 Large-scale smuggled tobacco

In 2000, a report commissioned by the World Bank using different expert sources estimated that 6 - 8.5% of cigarettes consumed globally are smuggled (Merriman et al., 2000). The lower range (6%) was based on import and export statistics and was mainly an estimate for large-scale smuggling. The 8.5% includes small-scale and large-scale smuggling as a of percentage domestic sales in 1995 (Framework Convention Alliance (FCA), 2008).

Large scale "organised" smuggling is described as "the illegal transportation, distribution and sale of large containers of cigarettes and other tobacco products" (Joossens et al., 2009). This allows smugglers to avoid all taxes on tobacco products by either diverting them from the legal market while they are in the wholesale distribution chain and transported untaxed, or in transit between the country of origin and their official destination (Joossens et al., 2010). Large scale smuggling is not limited to legitimate products as counterfeit tobacco products can also be smuggled (Joossens et al., 2010). This type of smuggling usually involves millions of cigarettes smuggled over long

distances and often involves large organised crime networks and sophisticated systems for distributing smuggled cigarettes at the local level (Merriman et al., 2002). "Round tripping" is a form of large scale smuggling where proportionally large price differences exist between neighbouring countries which facilitates the exportation of domestically produced tobacco that is then illegally re-imported into the country of origin untaxed. Exported cigarettes from Canada, Brazil and South Africa for example have been documented entering neighbouring countries and then reappearing in their country of origin at cut-rate prices, untaxed (World Bank, 1999).

Although "smuggling" is the widely used term to describe this activity, the tobacco industry does not use this term in internal documents (International Consortium of Investigative Journalists, 2001). Instead euphemisms or code words such as: duty not paid (DNP) and transit are used (WHO, 2003). The use of "Duty not paid" (DNP) interchangeably with smuggling is clearly demonstrated in Latin America (Collin et al., 2004). For instance, in Venezuela the DNP market is defined as: ...the volume of cigarettes produced in Venezuela, exported to Aruba and re-entering Venezuela as transit plus transit cigarettes produced elsewhere (British American Tobacco (BAT) internal memo: Venezuelan Market Definitions and Assumptions; as cited in Collin et al., 2004). In other parts DNP sales are analysed separately from legal sales in both the duty-paid and duty free markets (BAT (BJOS43); as cited in Collin et al., 2004) thereby identifying DNP as smuggled products. It is alleged that the most easily recognised reference to smuggling in tobacco industry documents is the term "transit". According to a 1993 tobacco industry document, BAT defined transit as "the movement of goods from one country to another without the payment of taxes and tariffs (which is more commonly known as smuggling) (BAT, 1993; as cited in Collin et al., 2004). Additionally, in a BAT letter on 25 August 1989 discussing illicit imports in Asia, it was stated "With regard to the definition of transit it is essentially the illegal import of brands

from Hong Kong, Singapore, Japan, etc., upon which no duty has been paid" (BAT, 1989; as cited in Collin et al., 2004).

Another code word used by the tobacco industry is "General trade", often abbreviated to "GT" and is seemingly BAT's most frequently used euphemism for smuggling operations in Asia (Collin et al., 2004). According to O'Keeffe (1994) "GT refers to exports made for onward sale to another market other than the market to where product was shipped, and where the packaging would normally be non-market specific" (O'Keeffe, 1994; as cited in Collin et al., 2004). Such products would often have substitute coding to identify the customer and therefore the intended end market" (O'Keeffe, 1994; as cited in Collin et al., 2004). Although not immediately evident, the meaning of GT becomes clear by contrast to other channels. Its use to designate smuggled tobacco products is further demonstrated by juxtaposition with legal sales. For example, a company plan from 1990 noted that in Taiwan legal business to some extent was compensated by GT sales (BATUKE, 1990; as cited in Collin et al., 2004).

It is estimated that organised smugglers can purchase a container of 10 million cigarettes on which they pay no taxes, for \$200,000. The fiscal value of this quantity of cigarettes in the EU is at least \$1 million, taking into account excise duties, value added tax (VAT), and import taxes (World Bank, 1999). The profits to smugglers are therefore quite substantial, enabling them to absorb long distance travel costs. It is claimed that smugglers will often smuggle tobacco alongside other illicit goods such as class A drugs, alcohol and counterfeit clothing, and are also believed to be involved in selling of pirate DVDs, funding terrorism and people trafficking (Jha and Chaloupka, 1999, Coker, 2003, US General Accounting Office, 2003).

2.2.2 Bootlegged tobacco

Bootlegging (also viewed as small-scale smuggling) of tobacco products involves duty-paid products being purchased in a low tax jurisdiction, usually in amounts exceeding the limits set by customs regulations and then illegally resold in a high tax jurisdiction paying no local revenue tax (Joossens et al., 2000; CMO, 2004; Hornsby and Hobbs, 2007). This type of smuggling is believed to be caused by tax differentials and arises from the allowance for legal cross-border shopping for tobacco products for personal consumption. These products then become "bootlegged" when they are illegally resold. Bootlegging is viewed as the old-fashioned style of smuggling, operated by individuals and small gangs/cells, crosses borders (either state or country), and involves thousands as opposed to millions of cigarettes (Shelley and Melzer, 2008). One form of bootlegging is "ant smuggling" which refers to the organised and frequent crossing of borders by a large number of people with relatively small amounts of low taxed or untaxed tobacco products (Joossens et al., 2009). Another form of bootlegging is the so-called "white van trade" which refers to the smuggling of duty-paid goods in passenger and light goods vehicles entering channel ferry ports and the channel tunnel under the pretence that they are for 'personal use' (Hornsby and Hobbs, 2007). No local duty or value added tax (VAT) is paid on these products and they are then resold in the illicit market. The appeal to bootleggers is the high profit margin that exists due to the differentials in the 'duty-free' and 'duty-paid' price of cigarettes.

Existing literature on the illicit tobacco trade focuses mainly on large-scale smuggling (see 2.2.1) and the illegal manufacture of tobacco products (described in paragraph 2.2.5); however legitimate cross-border shopping, which could also result in bootlegging, forms a substantial proportion of revenue loss (£1.4 billion in

2002/03) (Hornsby and Hobbs, 2007). This highlights a gap in research which could result in development of policies that will tackle cross-border shopping and its contribution to the illicit tobacco trade. It is suggested that in order to avoid cross-border purchases, an increased harmonization of national policies on the taxation of tobacco products needs to be conceived by the European Union (Lakhdar, 2008).

2.2.3 Duty frees (Tax avoidance)

Tax avoidance is defined as the purchasing of tobacco products in lower tax jurisdictions by individual tobacco users residing in high tax jurisdictions for their own consumption, within customs constraints (Joossens and Raw, 2012). As of October 2011, each traveller is able to bring in 800 cigarettes from EU countries (a reduction from 3,200) and 1 kilogram of tobacco (a reduction from 3 kilograms) (Her Majesty's Revenue and Customs (HMRC), 2013a). Travellers from countries outside the EU are allowed only 200 cigarettes and 250g of tobacco (HMRC, 2013b).

Variation in tobacco tax in Europe provides incentives for tax avoidance through smuggling or legal crossing to low tax jurisdictions. In the European Union (EU), one-third of EU citizens who made a trip to another EU country in 2008 brought home lower-priced cigarettes (European Commission, 2009). This scale of tax avoidance is of concern for two reasons. First and foremost, it may limit the control of consumption through taxation because a greater number of smokers avoid paying tax thereby undermining the effect of price rises on smoking behaviour (Stehr, 2005). Secondly, border crossing might be viewed as less harmful than smuggling because although it causes unnecessary transportation costs it is legal if the quantities purchased are up to or below the allowed amount (Stehr, 2005). Therefore more smokers are likely to engage in this activity. Duty free tobacco is legal only if the tobacco purchased is for use by the traveller or his/her family and not resold. However, it is difficult to determine and ensure

that these products are not sold on to other smokers. Lastly, tax avoidance could affect the accuracy of the estimation of the extent of illicit tobacco trade because it is difficult to determine whether all cross border shopping is solely for the traveller's use and not for the purpose of reselling. This in turn is likely to impact on the monitoring of the effectiveness of anti-illicit tobacco strategies.

2.2.4 Non-legitimate tobacco brands (Cheap whites)

Over the years the nature of the illicit tobacco trade has changed with the introduction of new illicit tobacco products into the market, such as 'cheap whites' (a term coined by the tobacco industry and used in some international enforcement agencies reports (Joossens, 2011). Cheap whites (also referred to as 'illicit whites' by the European Commission (Joossens, 2011) and HMRC define tobacco products that are factory made and manufactured with the approval of a licensing authority in that jurisdiction but with no existing legitimate markets and for the sole purpose of being smuggled, avoiding duty and being sold illegally in another market (HMRC, 2011a; Financial Action Task Force (FATF), 2012). Cheap whites are largely produced in countries outside the European Union and have little or no tax paid on them in the country where they are manufactured (HMRC, 2011a). In the UK, cheap whites have an established illicit market with brands including Raquel, Jin Ling, Richman and Marble (HMRC, 2011a). Ironically, this has resulted in cheap whites being counterfeited by criminal groups and passed off as the real product.

2.2.5 Counterfeit tobacco

Counterfeit tobacco products are products that are illegally manufactured and then passed off as legitimate products. It is estimated that up to 400 billion counterfeit cigarettes are produced in China each year (Joossens et al., 2009), approximately the number of cigarettes (both legal and illicit) consumed in the UK over a six-year period

(Shen et al., 2009). China is the biggest tobacco producer in the world and therefore the tobacco industry is seen as an important economic sector in the country (Shen et al., 2009). Since there is a huge global demand for tobacco, it comes as no surprise that large quantities of counterfeit cigarettes from China have been introduced into the global illegal tobacco trade. However, there are suggestions that the production of counterfeit cigarettes have increased in other parts of the world, such as the UK, Eastern Europe and other Asian countries (von Lampe, 2006; HMRC, 2008). This implies a growing trend of counterfeit tobacco manufacture.

Existing literature suggests that China is the main source of counterfeit cigarettes in the illicit market (Shen et al., 2009). Research conducted by Shen and colleagues described the various steps in the manufacture and distribution of counterfeit cigarettes in China. They suggest that there are three stages in the production of counterfeit cigarettes: acquiring raw materials, manufacturing counterfeit cigarettes and packaging counterfeit cigarettes. In China, it is supposed that counterfeit cigarettes are produced with tobacco of varying quality, with low quality tobacco bought from tobacco farmers used in most instances. The manufacture of counterfeit cigarettes requires rolling machines which are usually bought from state-owned cigarette factories by counterfeiters. However, recently counterfeiters have started to make their own cigarette rolling machines which reduces production costs. The packing of cigarettes is seen as the integral part of the process and different methods are employed so that consumers are deceived into believing the cigarettes are genuine and fraud detection avoided. After manufacture and packing, the counterfeit cigarettes go on to be sold in shopping centres, department stores, hotel-owned luxury shops and other legitimate small businesses (Shen et al., 2009). There are also a number of street-sellers who sell these cigarettes outside night clubs, discos, and restaurants or along the street and other public space (Shen et al., 2009). Tourist spots

are often used to sell counterfeit cigarettes as local cigarette brands are part of the tourist smokers' souvenir shopping in China (Shen et al., 2009).

According to Shen and colleagues, the distribution of counterfeit cigarettes in China and the roles played by various individuals is similar to the hierarchical distribution chain presented by Antonopoulos (2008) in his study of the smuggling network in Greece (Shen et al., 2009). This is not surprising as the distribution of counterfeit cigarettes also needs to be undertaken quickly and be undetectable, as with smuggled cigarettes. In addition counterfeit cigarettes in China are smuggled into the illicit market in other countries and become part of the illicit tobacco distribution network (Shen et al., 2009).

Success in reducing the quantities of legal cigarettes that have been illegally diverted to evade taxes (contraband genuine products) could be having an unintended consequence of causing the complementary increase in counterfeit products. For instance, in 2001–2002, 15% of all U.K. customs seizures of illicit cigarettes were counterfeit, but by 2006–2007, this had risen to 70% (HMRC, 2008), while in the U.S.A. seizures of counterfeit products exceeded those of genuine brands by 2003 (US General Accounting Office, 2004; as cited in Donaldson and Stephens, 2010). In the UK more recently, although efforts have been made by HMRC to curb the supply of counterfeit tobacco products (especially RYO tobacco – see Chapter 3) it still poses a threat, with 48% of seizures in 2009–10 being counterfeit (compared to 46% being cheap whites and 6% being genuine UK brands) (HMRC, 2011a).

2.3 Illicit tobacco trade as an organised construct

Large scale smuggling is believed to involve complex schemes, criminal organisations and tobacco companies (Shelley and Melzer, 2008). Smugglers are able to transport millions of cigarettes across various borders without the payment of taxes using sophisticated distribution modes (Joossens et al., 2000). To encourage trade between

countries, a so-called "in transit" system operates. This complex system of checks and documentation temporarily suspends custom duties, excise and VAT payable on goods originating in one country and bound for another country while they are in transit through other countries (Joossens and Raw, 1998; World Bank, 1999). However, there is evidence in Europe that many of these cigarettes simply fail to arrive at their destination, having been bought and sold by unofficial traders on the illicit market (World Bank, 1999). For instance, cigarettes bound for North Africa from the United States enter the transit system for transport through Antwerp in Belgium where they are temporarily stored before transport to Spain where they will be shipped to North Africa (Joossens and Raw, 1998). However, it is supposed that whilst in Antwerp these cigarettes are diverted from their intended destination into the European illicit market. Antwerp is the source of illicit cigarettes in Europe simply because this is where the cigarettes are stored and where they can be bought and distributed illegally (Joossens and Raw, 1998).

The intricacy and complexity of the smuggling depends upon the nature of the commodity and the size and ambition of the criminal groups involved (FATF, 2012). For instance, some groups will command all aspects of the production process, from obtaining raw tobacco products, through to developing the specific tobacco packaging that will generate suitable market interest or make to look legitimate if counterfeit (FATF, 2012). In contrast, other groups will rely on the work of key facilitators, often based overseas, who employ smaller legitimate tobacco manufacturers in sourcing the tobacco products and associated packaging. Then a distribution route and risk mitigating mechanisms is agreed upon with the facilitator to ensure successful delivery (FATF, 2012).

The illicit tobacco market involves a complex scheme of transportation and distribution of genuine or counterfeit tobacco products. A report by the World Health Organisation

(2003) described the following steps in the large scale smuggling system of genuine tobacco products:

1. Manufactured at one of the international tobacco companies;
2. Legally exported to a trader who is not located in the final country of destination and who buys the cigarettes under the 'duty suspended' transit regime and therefore pays no tax;
3. The smugglers then play hide-and-seek with customs authorities, exporting and importing the containers in different locations around the world in a short period of time, making the final owner untraceable and obscuring links between successive owners;
4. Containers are now transferred from the legal transit regime to the illegal circuit in an area known for its lack of surveillance. They are often concealed beneath other products; and
5. The smuggled products are then transported to the intended illicit market and resold through a well organised distribution network.

The success of smuggling relies on the cigarettes passing through a large number of owners over a short period of time, making their movements difficult to trace (lost in transit), with the structure of the transactions kept as complicated as possible to make investigation difficult (Joossens and Raw, 1998). Then, using a highly effective distribution network, the smuggled cigarettes are introduced into the market. Additionally, poor enforcement on illegal sales and difficulty in separating legal and illegal sales (Lakhdar, 2008) may reduce the risks to smugglers. References have been made to the participation of corrupt public officials in the large scale smuggling of cigarettes in Greece where customs officers, police officers and coast guards are bribed to aid or turn a blind eye to smuggling (Antonopoulos, 2008).

There is little evidence on the organisational structure of the illicit cigarette distribution network. However, van Duyne (2003), von Lampe (2003) and Antonopoulos (2008), have identified various levels in the organisation, distribution and sale of smuggled genuine or counterfeit tobacco products and they share some similarities. Von Lampe (2003) highlights three levels in the illegal cigarette market: procurement (usually from legal sources), wholesale distribution and retail sale. In the Netherlands, van Duyne (2003) expands on this and suggests five levels in this market which are outlined below:

1. **Individual entrepreneurs** who are in the position to purchase legitimate tax free cigarettes and resell these illegally.
2. **Professional transporters** that are legitimate licensed firms or one man enterprises involved in the cross-border transporting of the illicit cigarettes.
3. **Intermediaries** who are described as a non-specific group of individuals that form the focal points of networks and could consist of local traders that get the merchandise on the market.
4. **International traders** who operate within multinational networks
5. **Local traders** that sell on the illicit cigarettes acquired. They are dependent on networks of relatives and acquaintances and may not only sell to consumers but also to other smaller salesmen.

Van Duyne (2003) described this market as ‘unordered’ and open to anyone who has the time and opportunity to get involved. A few years on Antonopoulos (2008) presents a more organised picture of the illicit tobacco market, highlighting various levels in the social organisation of the sale and distribution of illicit cigarettes. This possibly highlights efforts by smugglers to adapt to developments and changes in the illicit tobacco market. Antonopoulos’ study of the illicit tobacco market in Greece

offers the most comprehensive distinction between the various levels in this organised illegal market, postulating that the network is the integral part of the smuggling ring and comprises of individuals that operate in cooperation and connect to each other and to other networks. His study outlines three levels of the cigarette smuggling network: upper level, middle level and street level and he expands on this by outlining various roles within each level. However he stipulates that not all of these levels are present in every smuggling network (Antonopoulos, 2008). These various roles are outlined below:

1. The **wholesaler** sits at the top and has the "managerial" position in the business of distributing the cigarettes.
2. The **procurers** buy large quantities of cigarettes from tobacco companies with the supposed intention of exporting them, but instead forward them (wholly or partly) to the wholesaler.
3. **Pushers** (described as intermediaries by van Duyne, 2003) are "trustworthy" individuals responsible for introducing the smuggled cigarettes to the market. These individuals could be past street-sellers, who depending on their abilities to manage and sell large quantities of cigarettes and their known contacts, manage to move up within the network. Each pusher at any given time could have about 10-15 street sellers working under them.
4. **Street-sellers** may primarily be from the migrant community and have the responsibility of selling the illicit cigarettes to consumers. The selling of illicit cigarettes could occur in the "open market" (public places, where street-sellers approach potential customers or wait to be approached) or in a "closed market" (where a sale is arranged by the pusher or the street-seller with trusted and established customers).
5. **Look-outs** are employed to warn or alert street sellers about the presence of the police (including non-uniformed police). They work in and around the areas where street-sellers are operating.

6. **House Guards** guard the houses or rooms rented by pushers to store boxes of illicit cigarettes before they are distributed to the street-sellers or sold directly to customers.
7. Legitimate **shop owners** usually own shops in the areas where street-sellers operate and provide their premises as a quick "refuelling" place for street-sellers or a place to hide smuggled cigarettes when the police are around.
8. **Drivers/Captains** are responsible for transporting quantities of cigarettes into the country or out (when the cigarettes are supposedly or actually exported) by road or by water. They are usually employed legally but mainly transport cigarettes illegally or concealed in their legal merchandise.
9. **Thieves/Burglars** are sometimes employed to feed the pushers with cigarettes stolen from warehouses where they are stored and destined for the legal cigarette market. They are similar to procurers but are less often used.
10. Corrupt **public officials** are seen as a "vital node in the cigarette smuggling network" and include customs officers, police officers and coast guards bribed to either "overlook" or allow for importation and storage of large quantities of smuggled cigarettes.

The above alludes to the existence of a range of "entities" in cigarette smuggling consisting of individuals and groups with varying participation and networks which can be placed on a continuum, with the aim to easily and quickly acquire and distribute illicit cigarettes (Antonopoulos, 2008). Although providing a picture of the organisation of cigarette smuggling, it should be noted that this structure is based on evidence in Greece and may differ in other jurisdictions. Furthermore, smugglers are believed to respond quickly to new control measures (HMRC, 2008) and so the organisation of this smuggling network is likely to change over time.

2.4 Effects of illicit tobacco

2.4.1 Effect of illicit tobacco on smokers' health

Although counterfeit tobacco products require the same raw materials in their production as legitimate products, they may become contaminated with sand and other packing material (House of Commons, 2005). There is some evidence to suggest that mainstream particulate cadmium, lead and thallium levels from counterfeit cigarettes were significantly higher than the corresponding levels from legally manufactured commercial cigarettes of the same brand and variety using a standardised smoking protocol (cadmium - 2.0–6.5, lead - 3.0–13.8 and thallium - 1.4–4.9 times higher than in legitimate tobacco products) (Pappas et al., 2007). This finding implies that smokers could receive significantly higher exposures to various toxic and carcinogenic metals from counterfeit cigarettes than from legal cigarettes. The likelihood of higher concentrations of heavy metals such as cadmium (Stephens et al., 2005), tar and carbon monoxide (HM Revenue and Customs and HM Treasury, 2006) in counterfeit tobacco resulted in claims that use of counterfeit tobacco (specifically cigarettes) could be significantly more harmful than legitimate cigarettes (House of Commons, 2006).

Previously it was assumed that there was no evidence of smokers of counterfeit cigarettes being in any greater risk than those using non-counterfeit tobacco products (Jarvis, personal communication, 10 March 2008; as cited in McEwen and Strauss, 2009) and that a lot is unknown about the relative health risks of smoking illicit tobacco (Bittoun, 2004). One study attempted to quantify this and found that those who smoked or had ever smoked illicit tobacco had decreased mental and physical health compared to smokers of legitimate tobacco (Aitken et al., 2009). However, the authors were unable to attribute any causality to the relationship due to the cross-sectional design of their survey. It is possible that the independent significant

associations found in this study between illicit tobacco use and high cigarette consumption and younger age of smoking onset are explanations for reduced health. Additionally, this study's aim was to influence the development of an effective media campaign intended to reach illicit tobacco smokers and cause behaviour change.

The tobacco industry has supported the message that counterfeit tobacco products are more harmful by sponsoring articles such as those published in a popular national newspaper in the UK which reported: *'human excrement, asbestos and dead flies: The ingredients found in fake cigarettes that cost the taxpayer billions'* (Daily Mail, 2012). Articles like the aforementioned were possibly commissioned by tobacco industry representatives to highlight the harmful components of counterfeit tobacco in order to cause consumers to believe legitimate tobacco products are safer. Claiming counterfeit tobacco is 'more harmful' however implies that legal tobacco products are 'safer' - a public health message that should be avoided as it could have serious repercussions for overall health messages about the impact of smoking (Department of Health, 2008; McEwen and Strauss, 2009).

2.4.2 Effect of illicit tobacco trade on youth smoking

Cigarette prices have a significant impact on youth smokers with cigarette demand being highly price elastic in this group of smokers (Kostova et al., 2011; Nikaj and Chaloupka, 2013). Therefore, illicit tobacco could encourage youth smoking as it provides them access to more affordable tobacco products. In addition, the distribution network for illicit tobacco products is unregulated thereby making tobacco easily accessible to children and young people (HMRC, 2008). Reducing young people's access to cigarettes is believed to be a key element of smoking prevention (Amos et al., 2009). It is supposed that with increased retail enforcement,

young smokers would simply find alternative sources to obtain tobacco products (Forster et al., 1998; Croghan et al., 2003; Forster et al., 2003; Jones and Sharp, 2002). Such sources include family, friends and/or suppliers of illicit cigarettes (the illicit market and/or counterfeit). There is evidence that young smokers are well aware of the illicit tobacco market. A study of 11-16 year olds in the UK found that 52% of ever smokers in this group were aware of cigarettes or RYO tobacco being smuggled into the country and sold cheaply through family, friends, TV and newspapers of cigarettes or RYO tobacco being smuggled into the country and sold cheaply (Moodie et al., 2010). Forty-one percent were aware of cigarettes or RYO tobacco being sold cheaply in places such as market stalls and of people bringing van or boat loads of cigarettes or RYO tobacco into the country for cheap sale (42%). Over three-quarters (82%) were aware of at least one of the descriptions of illicit tobacco described in section 2.2 (Moodie et al., 2010). A quarter of ever smokers claimed to have been offered and 14% claimed to have purchased cigarettes or RYO tobacco that they believed were smuggled in the previous 6 months (Moodie et al., 2010). Young smokers, as well as being aware of illicit tobacco are engaging in this illicit market. A study of 15 and 16 year old school children in the North West of England found that 28% of these young smokers had purchased fake cigarettes, 57% had purchased foreign cigarettes and 15% had bought cigarettes from street sellers or neighbours (Hughes et al., 2009). A recent survey in the North of England reported that a third of 14–17-year-old smokers bought illicit cigarettes and/or tobacco from a friend (59%), a fag house (34%) and a shop (25%) (NEMS, 2011).

The use of illicit tobacco by young smokers may vary in different jurisdictions. A qualitative study conducted in Scotland found that although young smokers (aged 12 to 15 years) were familiar with imported cigarettes due to family members and friends bringing them back from abroad to sell and share with one another; there was

no clear evidence that participants were either given them or able to buy them from family members (Robinson and Amos, 2010). The young smokers in this study were aware of ‘fag houses’ in their area where people purchased illicit cigarettes but did not appear to visit them (Robinson and Amos, 2010). Furthermore, counterfeit cigarettes did not feature greatly in their accounts, although several participants had heard about and tried them. Some thought that they were not the same as ‘real’ cigarettes and thought they tasted horrible and were unpleasant to smoke (Robinson and Amos, 2010).

Nonetheless, the illicit tobacco trade is an important factor that undermines attempts to reduce smoking prevalence in young people, especially those from deprived backgrounds (Moodie et al., 2010).

2.4.3 Loss of government revenue

The illicit tobacco market deprives governments of large sums of revenue which could otherwise be utilised in the provision of public services such as health care, education and transport (Joossens et al., 2010). Lencucha and Callard (2011) sought to measure the short term economic consequences of the illicit trade of tobacco products. They analysed existing data (using illicit trade estimates from 2003 to 2008) in order to calculate the estimated loss of revenue per country per year. This was achieved by determining the price of a single cigarette in each country and then calculating the tax revenue per cigarette per country (Lencucha and Callard, 2011). Lost excise tax revenue as an average of the 6-year period (between year 2003 and 2008) for the most sold brand (Marlboro) ranged from over \$23 million per year in Ecuador to almost \$5 billion per year in the UK (Lencucha and Callard, 2011). Furthermore, lost revenue due to the illicit trade of cigarettes was higher than government investments in tobacco control strategies in each country (WHO, 2009;

Lencucha and Callard, 2011). The revenue losses due to the illicit tobacco trade in most countries were relatively high and significant. However, these estimates suffer from the limitation that illicit trade data is limited and usually estimates and so do not sure the true extent of illicit tobacco purchase. Moreover, this study used data from the Euromonitor International, which has been accused of providing an overestimation of illicit tobacco trade and suggest this increases year on year (Blecher, 2010a). Therefore, the illicit trade compromises government programs by depriving communities of revenues that could be used for public purposes including the funding of tobacco control efforts.

2.5 Drivers of the illicit tobacco trade

According to experts the illicit tobacco trade exists as a result of classic supply and demand (Joossens, 2011). Supply by legal and illegal tobacco manufacturers looking to increase their sales, profits and market share or to penetrate new markets; and demand by smokers for cheaper products or (in some markets) for specific tobacco products perceived as better quality and not available on the legal domestic market (Joossens, 2011). Others suggest that there are four main causes for the emergence of the illicit tobacco market: (1) the difference between duty-free and legal retail prices; (2) the difference in retail prices among jurisdictions, due to different levels of taxation; (3) the existence of corruption among border and customs officials and the long-term involvement of organized crime groups in the cigarette trade ; and (4) the willingness of many cigarette companies until recently to conspire in or to overlook the smuggling of their products (van Duyne, 2003; von Lampe, 2006; Beare, 2002; von Lampe, 2005).

2.5.1 High tobacco prices

2.5.1.1 *Tobacco taxation*

Increases in tobacco taxes (above the rate of inflation) are widely regarded as a highly effective method for reducing tobacco use (Chaloupka et al., 2012) and under Article 6 of the WHO FCTC, all parties are called to use tax and price policies to decrease tobacco consumption (WHO, 2005). It is proposed that in most countries tobacco taxes should account for at least 70% of retail prices as this would lead to significant price increases, result in many tobacco users quitting and deterring the initiation of smoking (Chaloupka et al., 2012). In the UK, there are a number of different types of tobacco excises. First, *ad valorem tax* is a tax based on a percentage of the retail price (Gilmore et al., 2010; Smith et al., 2012). This type of tax tends to heighten price differences between cigarette brands, making expensive brands considerably more expensive relative to cheaper ones (Smith et al., 2012). From a policy standpoint, ad valorem taxes are attractive because they automatically increase with industry price increases and are linked to inflation. However, this also means ad valorem excise allows the tobacco industry to control tax levels by keeping prices low (e.g. companies could lower their prices in response to tax rises, reducing the impact of the tax increase and thus lowering the associated public health benefit) (Gilmore et al., 2010; Smith et al., 2012).

The second type of tax is the fixed tax per cigarette, *specific tobacco excise* per cigarette. This fixed, monetary tax is applied to every cigarette, regardless of its baseline price (Gilmore et al., 2010; Smith et al., 2012). Unlike the ad valorem, this tax reduces price differences between brands therefore benefitting manufacturers of more expensive cigarettes. Specific taxes tend to increase consumer prices relatively more than *ad valorem* excises, leading to higher reductions in consumption, therefore it is generally favoured for tobacco control purposes (International Agency for Research on Cancer (IARC), 2011). It is argued that specific tobacco taxes would ensure the health impact of tobacco taxes as well as the sustainability of tobacco tax

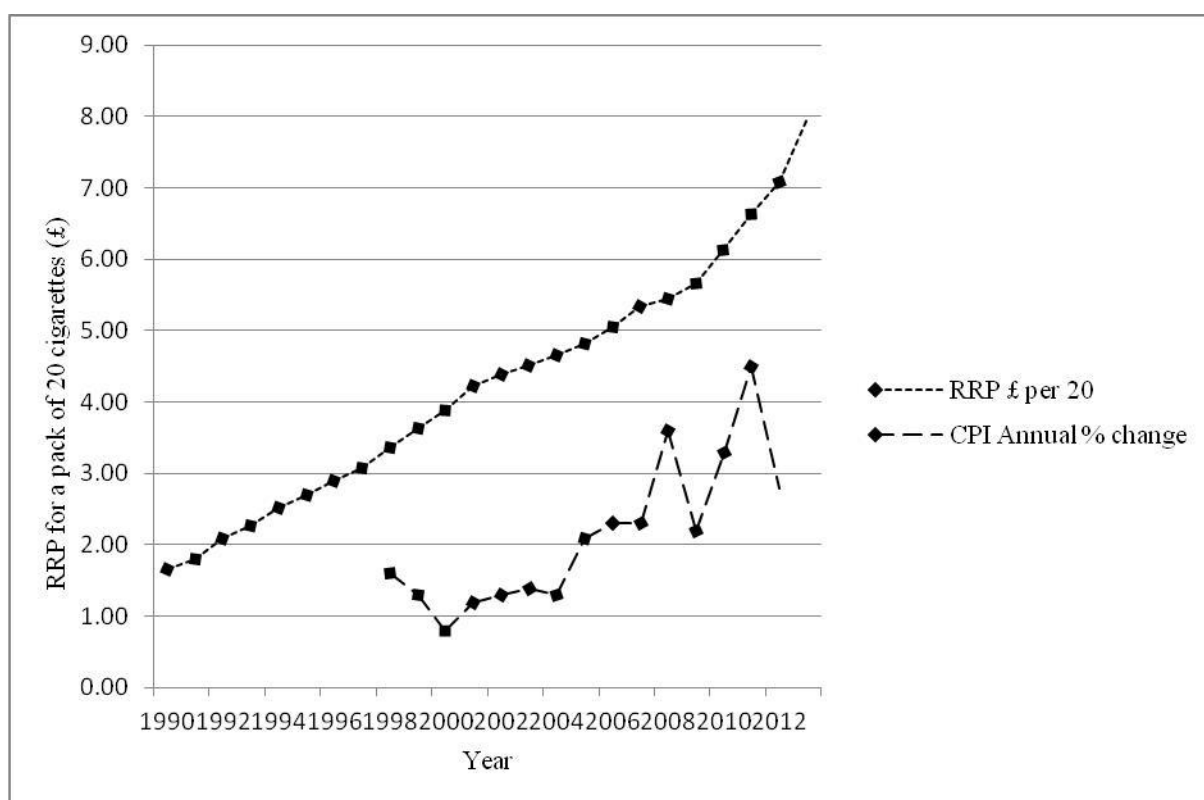
revenues (Chaloupka et al., 2012). However, this type of tax also allows tobacco companies to hide rises in the base price of their products, boosting their profits (Smith et al., 2012).

Third, *import duties* are the taxes paid on goods imported into a country or region. Duties may be applied to raw tobacco and/or tobacco products and may be calculated on a *specific* or *ad valorem* basis (Smith et al., 2012). Finally, *Value added tax* (VAT) or sales tax is the general consumer taxes (usually calculated on an *ad valorem* basis) which all products including tobacco products are subject to (Smith et al., 2012).

2.5.1.2 Price of cigarettes and tobacco in the UK

Over the last two decades, the price of cigarettes has steadily increased above the rate of inflation in the UK, rising from £1.65 in 1990 to £7.98 in 2013 (Figure 2.1). Cigarette smokers have a choice between multiple brands, ranging from ‘economy’ (approximately £4.70 per pack) to ‘premium’ (£6.49 per pack and above) (Spanopoulos et al., 2012). According to the Tobacco Manufacturers Association (TMA - the documentation centre for tobacco companies worldwide), the Recommended Retail Price (RRP) of a typical pack in the Most Popular Price Category (MPPC) in March 2013 was £7.98 (TMA, 2013). However, it is believed that the actual average price paid by consumers for legal cigarettes tends to be 8 to 10% lower than this (West, 2008; Spanopolous et al., 2012), meaning a typical price of £7.19 to £7.34.

Figure 2.1: Recommended retail price (£) of a typical pack of 20 cigarettes in the most popular price category on the 1st of January from 1990 to 2013 – *source of data TMA, 2013*



Note: CPI = Consumer Price Index; RRP = Recommended retail price

The average price of illicit cigarettes or tobacco is estimated to be half the price of duty-paid tobacco (West et al., 2008) and in some cases up to 75% cheaper (FATF, 2012). According to the tobacco industry, ‘cheap whites’ smuggled into the UK are sold at a street price of as little as £2.50 to £3.00 per packet (HMRC, 2011a). There is limited independent evidence on the reported price paid for illicit tobacco products in the UK.

2.5.1.3 Tobacco price differentials

An economic motivator for the illicit tobacco market is the unbalanced tobacco taxation policy in neighbouring countries, states or provinces which results in price differentials in different jurisdictions. In 2010, the EU Directives specified that member states meet a minimum tax burden of 60% of the MPPC (with exception of

countries whose excise tax exceeds €115 per 1000 cigarettes) in order to harmonise high cigarette taxation (Blecher et al., 2013). This is intended to reduce price differentials within the EU in order to remove the incentive for the illicit tobacco trade. Countries have until 1 January 2014 (or 1 January 2018) for other countries (Blecher et al., 2013). Even so, as of 2012, a 20 pack of cigarettes in the MPPC was £6.95 in the UK and £5.51 in Sweden, but as little as £1.77 in Bulgaria (HMRC, 2012a). Large differences between retail prices encourage the purchase of duty-paid products in low tax areas, which are then transported into high tax areas (Joossens, 1999). These price disparities unsurprisingly, create sufficient demand for this commodity which provides a large profit margin for those involved in its sale.

The tobacco industry has argued that tobacco smuggling is caused by the large price differentials between different countries and hence recommend tobacco taxes be reduced. This argument appears sound. However if this were the case, countries with highly priced cigarettes would experience high levels of smuggling, whereas countries with cheap tobacco would experience low levels, but almost the opposite is true (Joossens and Raw, 1998). For instance, Sweden and Norway have high cigarette prices but showed low levels of smuggling, whereas Spain and Austria showed high levels of smoking although they had low priced cigarettes (Joossens and Raw, 1998).

2.5.2 Corruption

Van Duyne (2001) described corruption as an illegal decision-making process in which three components are essential: discretionary power, known decision rules and accountability. It is believed that in addition to the differentials in the price of tobacco and cigarettes, corruption also contributes to the illicit trading of tobacco through smuggling (Merriman et al., 2000). Using standard indicators of corruption levels provided by the Transparency International's Index of Countries (based on

perceptions of the degree of corruption as seen by business-people, risk analysts, and the general public), Merriman and colleagues discovered that the level of tobacco smuggling rises in line with the degree of corruption in a country (Merriman et al., 2000). Similarly, evidence from other researchers suggests that the illicit tobacco trade functions not only through weak border controls but also corruption (Prinsloo and Naudé, 2009; as cited in Blecher, 2010a). It was reported that connections with government officials is needed to safely smuggle large quantities (possibly consignments of millions of cigarettes) across the borders in central and eastern Africa (Titeca et al., 2011). In addition, in Uganda customs officials have implicated high-level government authorities in cigarette smuggling (Nabyama, 2008, as cited in Titeca et al., 2011; Fjeldstad, 2006).

2.5.3 Organised criminality

The appeal of profits from tobacco smuggling unsurprisingly attracts traditional organized crime groups (Shelley and Melzer, 2008), especially as tobacco products are easy to transport and ever in demand (Louis, 2002). For decades, this illicit trade has benefited crime groups and corrupt officials, such as the Italian mafia which has been involved in this trade since the early- or mid-twentieth century (Paoli, 2003).

In Australia, tobacco growers have also been implicated in the illicit trade of tobacco. It has been suggested that growers sell tobacco grown in excess of their allocated entitlement or rejected by manufacturers to organised criminal gangs, who in turn use these to illegally manufacture tobacco products (Price Waterhouse Cooper, 2005).

2.5.4 Links to terrorism

The profitable illicit tobacco market has begun to rival drug trafficking as it is a relatively lower risk funding source for terrorist groups (Price Waterhouse Cooper,

2005). Many global terrorist groups, including Hezbollah, Hamas, Al Qaeda, IRA (Irish Republican Army), PKK (Kurdistan Workers Party), ETA (Basque Fatherland and Liberty), and Egyptian and Palestinian Islamic Jihad, have been identified as participants in the illicit tobacco trade (Horgan and Taylor, 1999; Coker, 2003; Billingslea, 2004; Makarenko, 2004). Furthermore, the U.S. government and law enforcement agencies discovered the manufacturing of counterfeit cigarettes in the tri-border region of South America by terrorist organizations (Fromme, 2006; Hudson, 2003; as cited in Shelley and Melzer, 2008; Sverdlick, 2005). The U.S. Government Accountability Office (GAO) has therefore ranked cigarette smuggling among the top three fundraising activities used by terrorists (GAO, 2003).

Criminal and civil cases filed in U.S. courts demonstrate that the illicit trade in tobacco products can generate significant financial resources for terrorism (European Community v. R.J. Reynolds et al., 2002; European Community v. R.J. Reynolds et al. And Phillip Morris et al., 2001; United States of America v. Mohamad Youssef Hammoud et al., 2001; United States of America v. Mohamad Youssef Hammoud, 2004; as cited in Shelley and Melzer, 2008). It is believed that the combined total profit from cigarette smuggling for the three primary factions of the IRA (the Provisional IRA, Real IRA, and the Continuity IRA) reached approximately \$USD 100 million between 1999 and 2004 (Billingslea, 2004). These findings suggest that the illicit tobacco trade provides a lucrative funding opportunity for terrorism by generating millions of dollars for this purpose and is a major source of revenue for terrorists (Shelley and Melzer, 2008). Additionally, this is seen as a contradiction of the view of the illicit tobacco trade as “harmless or petty crime” (Shelley and Melzer, 2008).

2.5.5 The Tobacco industry's involvement

2.5.5.1 *Tobacco industry tactics to influence tobacco tax*

Since tax increases are proven to be an effective public health strategy to reduce smoking prevalence, it is no surprise that the tobacco industry has made attempts to discourage these increases. A review of the literature on the tobacco industry's efforts to influence tax levels suggests that the aim was not only to prevent tax increases, but also to reduce current levels (Smith et al., 2012).

The main argument utilised by the tobacco industry against tax increases (or to secure tax reductions) is that tax increases are counter-productive as they promote illicit tobacco trade which in turn contributes to broader crime problems (Traynor, 1996; Smith et al., 2012). Cautious of the impact of rising market prices for cigarettes and tobacco, the industry argues that smuggling is caused by price differences between countries, which create an incentive for smugglers. This stance is well documented in the UK where the tobacco industry continues to claim that tax increases automatically lead to increases in smuggling, as evident from this statement taken from a press release by the TMA: *"Government has today increased tobacco duties by 2% above inflation which clearly demonstrates a complete lack of joined-up-thinking as taxation is the acknowledged driver of the illicit tobacco trade."* - Christopher Ogden, Chief Executive of the TMA (TMA, 2011).

To promote their arguments against tobacco tax increases, there is evidence that the tobacco industry utilised front groups (Traynor et al., 1993; Apollonio and Bero, 2007; Smith et al., 2012) and employed credible allies such as key labour unions and minority groups for anti-tobacco tax campaigns (Smith et al., 2012). Furthermore, at a time of tax rises in Canada, there is evidence that the tobacco industry helped promote smuggling to maintain or increase their profit margins and to support their

claim that tax increases increase smuggling levels (Kelton and Givel, 2008). The tobacco industry's argument that high levels of tax could lead to illicit trade is questionable. According to Joossens and Raw (1998), if this were true, countries with highly priced cigarettes would experience high levels of smuggling into them and countries where cigarettes are cheap would not, but almost the opposite is true (Joossens and Raw, 1998). In fact, countries with higher tobacco taxes experience, on average, lower rates of smuggling compared with countries with low taxes, thereby disproving the idea that cigarette smuggling is caused by 'market forces' (WHO, 2003). Also, high levels of smuggling exist between countries with similar legitimate tobacco prices, and in many countries with extremely low tobacco taxation and prices (Joossens and Raw, 2002). Also of interest is the evidence that, in some countries where the tobacco industry's approach was adopted and where taxes were reduced to circumvent smuggling (e.g. in Canada), the outcome was a fall in revenue and an increase in tobacco consumption (Joossens and Raw, 1995).

Another argument used by the industry in opposition to tobacco taxation is that tobacco excises are socially regressive; that is higher tobacco taxes take up a larger proportion of disposable income for deprived groups (Smith et al., 2012). However, it is argued that the impact of tax increases on the poor can be offset by using revenues generated from the tax increase to help poor tobacco users quit and health promotion efforts which target the poor (Chaloupka et al., 2012). There is evidence that not only did the tobacco industry strive to influence tobacco tax increases, but they also made efforts to influence tobacco excise structures (Smith et al., 2012; Shirane et al., 2012). Their aim was possibly to undermine the most effective policy lever for tobacco control, as well as increase their profits. This agenda was promoted by claiming that these structures would increase government revenue and reduce illicit trade (Gilmore and McKee, 2004; Gilmore et al, 2007; Nakkash, 2008; Barnes and Glantz, 2008),

even when tobacco companies were aware this was not necessarily the case (Gilmore and McKee, 2004; Gilmore et al., 2007).

Although advocating to keep tobacco prices low, it is well established that the tobacco industry over-shifted tax increases in some countries (i.e. increase cigarette prices, and thus profits, on top of the excise increase) in some countries (Shirane et al., 2012). In so doing, they were able to hide their price increases which represent additional profits.

2.5.5.2 The Tobacco industry's role in the illicit tobacco trade

It has been argued that the tobacco industry not only benefited from but also participated in large smuggling operations. There is evidence of the direct and indirect involvement of the tobacco industry in the illicit tobacco trade through their own admission (Clarke, 2000; as cited in Joossens and Raw, 2008), internal documents (Collin et al., 2004; Lee and Collin, 2006; LeGresley et al., 2008; Nakkash and Kelley, 2008) and court judgements (Canada Revenue Agency, 2008; as cited in Joossens and Raw, 2008). The motive was to use smuggling to sell their tobacco products at lower prices to specific market sub-groups which, under legal market conditions, could not be penetrated (Joossens and Raw, 2000). The tobacco industry also benefited from the presence of their smuggled tobacco products in a market that, until then, was closed to imported brands. This helped increase the demand for those brands, thereby increasing their market share (World Bank, 1999).

In the early 1990s and early 2000s, large scale investigations of tobacco industry corporate misconduct were conducted by Canadian law enforcement and the European Community (Shelley and Melzer, 2008). Canada attempted to control smuggling activities by filing suit against R. J. Reynolds (RJR) and its affiliates in

U.S. courts (Joosens and Raw, 2000). In 1998, Northern Brands International (NBI), an affiliate of RJR Nabisco, pled guilty to assisting criminals smuggle approximately eight billion contraband cigarettes between the United States and Canada (Joosens and Raw, 2000). One year later, the Canadian government filed another suit under the Racketeer Influenced and Corrupt Organizations (RICO) statute against RJR Tobacco Holdings, Inc., and several related corporations, for conspiring to defraud the Canadian government since 1991 (Beare, 2002). In 2000, the Government of Canada again filed suit against RJR in U.S. courts where they sought more than \$USD 1 billion in damages. The complaint described the schemes used by RJR and NBI to traffic cigarettes in and out of Canada to evade taxes (Beare 2002). The case was dismissed due to jurisdictional issues (Beare 2002). In 2000, 2001 and 2002 complaints filed in U.S courts by the European community accused RJR of exploiting established smuggling routes by shipping large volumes of cigarettes to shell corporations (institutions that do not conduct any commercial or manufacturing business or any form of commercial operation in the country where their registered office is located – Buchanan, 2004) using spurious documents (Shelley and Melzer, 2008). To facilitate this illicit trade, they located traffickers, developed complex schemes to move their products, and intentionally packaged cigarettes to disguise their identity to aid their smuggling through known smuggling channels (Shelley and Melzer, 2008). More recently, there have been thorough investigations suggesting that tobacco companies behaved like criminals by intentionally engaging with smugglers (Shelley and Melzer, 2008).

The role of the tobacco industry in the illicit tobacco trade is well documented in some countries. For instance, British American Tobacco (BAT) in Uzbekistan utilised smuggling as one of its key market entry strategies (Gilmore and McKee, 2004). Smuggling enabled BAT to establish demand for its brands by ensuring that

they were available cheaply, in turn stimulating consumption and later on demand (Gilmore et al., 2007). The presence of illicit trading of cigarettes was then used to argue against high taxation rates, based on the argument that high rates would encourage smuggling. As mentioned previously in section 2.5.4.1, the tobacco industry used this argument to encourage governments to reduce taxes on tobacco. However BAT's practices in Uzbekistan demonstrate that smuggling was taking place despite the very low taxes on imports (Gilmore et al., 2007). In 2007 the price of cigarettes in Uzbekistan was the lowest in the European region with the retail price of the most popular and cheapest local brand of cigarettes \$0.01 for 20 cigarettes (Gilmore et al., 2007).

The tobacco industry's role in smuggling was highlighted in the now infamous quote by George Osborne (then a member of the Public Accounts Committee (PAC)), recorded during an investigation into tobacco smuggling by the PAC: *"One comes to the conclusion that you are either crooks or you are stupid, and you do not look very stupid. How can you possibly have sold cigarettes to Latvia, Kaliningrad, Afghanistan and Moldova in the expectation that those were just going to be used by the indigenous population or exported legitimately to neighbouring countries, and not in the expectation they would be smuggled?"* - George Osborne MP (PAC, 2002). In addition, the tobacco industry has also admitted their involvement in smuggling: *"Where any government is unwilling to act or their efforts are unsuccessful, we act, completely within the law, on the basis that our brands will be available alongside those of our competitors in the smuggled as well as the legitimate market."* - Deputy Chairman of British American Tobacco (Clarke, 2000; as cited in Joossens and Raw, 2008).

The tobacco industry now argues that, although in the past smuggling of their

products might have been an issue, it is no longer the case, and that the illicit trade in counterfeit tobacco products is now the biggest problem in need of addressing (Arnott et al., 2008). However, there is evidence to show that the tobacco industry has shifted its smuggling efforts from the Western world to Africa where corruption makes it easy to influence government and facilitate the illicit tobacco trade. There are documents to suggest that smuggling has occurred in at least 40 of 54 African countries (Commission for Africa, 2005). Furthermore, tobacco industry internal documents suggest that smuggling has been central to BAT's corporate strategy across Africa. These documents describe how BAT knowingly supplied cigarettes for smuggling purposes while simultaneously relying on legal exports as cover for larger scale smuggling (LeGresley et al., 2008). Even more recently, there is new evidence to suggest tobacco industry ongoing involvement in cigarette smuggling until at least 2010 (Holland et al., 2011; Skavida et al., 2012).

2.5.5.3 The Tobacco Industry's use of illicit trade as argument against new tobacco control policies

The tobacco industry have made claims that tobacco control policies such as plain packaging and ban on point of sale displays would exacerbate the illicit tobacco trade. According to the tobacco industry: *'Generic packaging would create significant incentives to counterfeiters and smugglers [...] will stimulate both the demand and supply of illicit trade'* - **Philip Morris International (2013)**; *'Making all tobacco products available in the same, easy-to-copy plain packaging would lead to a significant increase in counterfeit products, undermining the considerable joint work being undertaken by the tobacco industry and customs authorities worldwide to combat illicit trades'* - **Imperial Tobacco (2013)**; *"We believe a policy designed to make tobacco less accessible to youth could actually end up having the opposite effect — by increasing the black market and making the products cheaper and more*

accessible. Generic packaging would make it harder to prevent smuggled and counterfeit products entering a market, eroding government tax revenue and disrupting efforts to tackle the illegal trade in tobacco products that plays a significant role in funding international crime and terrorism” - British American Tobacco (2013a); ‘Plain packs are also likely to lead to yet further increases in the smuggling of tobacco products and plain packs would make it so much easier for a counterfeiter to copy than existing branded packs making it even more difficult for a consumer to differentiate between genuine and counterfeit products’ - TMA (2011); ‘The Department of Health is under pressure to introduce plain packaging for tobacco products. JTI believes that such a move would amount to commercial vandalism and would have serious consequences in terms of increasing illicit trade’ - Japan Tobacco International (2013).

The tobacco industry argues that plain packaging would make it easier and cheaper to manufacture counterfeit tobacco, thereby stimulating growth in the illicit market. However, given that the costs of manufacturing cigarettes for the illicit market on a large scale are incredibly low, there is no evidence to suggest that the presence of branding on packaging would impact upon these costs in any significant way (Moodie et al., 2011). A study conducted with young adults in Scotland found that packaging whether branded or plain had no impact on the decision to purchase and consume counterfeit tobacco (Moodie et al., 2012b). Smokers in this sample were still able to readily recognise counterfeit tobacco products due to its poor quality packaging, poor product appearance and performance (strength) (Moodie et al., 2012b). This finding would appear to refute the tobacco industry’s argument that product packaging matters in the purchasing decision.

The tobacco industry has also used the illicit tobacco trade to argue against the ban

on point of sale displays (POS). According to the tobacco industry: *‘Display bans impede competition, impose significant costs and other burdens on retailers, encourage price competition (and cheaper cigarettes), and foster illicit trade in tobacco products. Moreover, it is evident that moving tobacco products “under the counter” will make it easier for criminals to infiltrate the legitimate trade channel with contraband and counterfeited packages and harder for enforcement authorities to determine whether and where illicit products are sold’* - **Phillip Morris International (2013)**; *‘Tobacco measures such as ‘display bans...will promote an ‘under the counter culture’ that will blur the line between legitimate and illicit tobacco, making it harder to detect illicit tobacco and harder to reinforce the message that smuggling is a crime...’* - **British American Tobacco (2008)**.

It is unlikely that removal of point of sale (POS) displays would encourage tobacco smuggling as asserted by the tobacco industry. Although not aimed at investigating this, a study on the impact of the removal of POS displays in Ireland found no evidence that it increased illicit tobacco levels (McNeill et al., 2010).

2.6 Estimating illicit tobacco trade

Transparent and public data on the illicit tobacco trade are absent in most European countries. Where available, the variations in methodologies applied in estimating the market means that comparisons are difficult to make between them (Joossens et al., 2010).

2.6.1 Methodologies applied to measure illicit tobacco trade

Measuring illicit tobacco trade is methodologically challenging for numerous reasons. First, it is an illegal activity and it is improbable that illegal traders will record their activities as legal traders do. Secondly, for security reasons, data on illicit

trade are difficult to obtain as law enforcement agencies often prefer not to publicise the nature and scope of their activities (Joossens et al., 2010). According to the Framework Convention Alliance (FCA), it is widely acknowledged that estimations of the illicit tobacco market are rarely precise (FCA, 2008). In 2006, the size of the illicit tobacco market varied significantly depending on the country, with Albania having the highest level at 50-40% of the tobacco market being illicit and Canada and Vietnam having the lowest level at 10% (FCA, 2008). One of the problems is that estimates of the illicit cigarette market are expressed in different measures, sometimes as a percentage of cigarette sales based on tax records, sometimes as a percentage of cigarette consumption or sometimes as a percentage of the cigarette market.

Currently, there is no widely acknowledged method for measuring the market shares of illicit tobacco. Researchers have developed sophisticated econometric techniques and other analytical methods for assessing tax evasion. For example a mathematical formula using economic data of the relationship between observed tax paid sales, variables associated with the demand for tobacco, and variables associated with smuggling is thought to be useful in determining the level of smuggling (Merriman et al., 2002). However, none of these widely applied methods were deemed fully satisfactory due to the fact that these methods require that levels of tax evasion be estimated based on observable discrepancies in observed data (Ciecierski, 2007). Nevertheless, the International Agency for Research on Cancer (IARC) handbooks on Methods for Evaluating Tobacco Control Policies (Volume 12, 2008) and Tobacco Taxation (Volume 14, 2011) outline the different methods used to measure illicit trade. The three most commonly used methods are outlined below:

1. **Comparison of tax paid sales and individually reported consumption measures.** This methodology assumes that if there are no reporting biases in

measures of tax paid sales and measures of average consumption and prevalence obtained from representative population surveys, then the difference between the two should accurately reflect the size of the illicit market (IARC, 2008). The UK adopts this methodology subtracting legitimate consumption (adapted from returns to HMRC on cigarette and tobacco volumes sold and monies received) from total tobacco consumption (adapted from annual national survey self-reported consumption figures). The residual is assumed to represent the illicit market (HMRC, 2011b). A limitation of this methodology is the likelihood of temporary biases in tax paid sales measures, as these generally reflect shipments at the factory or wholesale level rather than actual consumption. In addition, population surveys of tobacco use are likely to show underreporting (Gallus et al., 2011). Thus, both tax paid sales and tobacco consumption could be underestimated. In the UK, underreporting of tobacco consumption is adjusted for by using an uplift factor (calculated by taking estimates of consumption in a year in which there is believed to be little or no illicit market and use HMRC clearance data, duty free and cross border shopping estimates as a true indication of total consumption) (HMRC, 2011b). Even so, as social norms against tobacco use strengthen over time, the extent of underreporting in population surveys is likely to grow, reducing the validity of a measure based on this approach (IARC, 2008).

2. **Survey of tobacco users' purchase behaviours.** This method uses representative surveys of tobacco users that collect information on various aspects of purchase behaviour, including purchase location and price. This can be helpful in assessing the extent of various forms of individual tax avoidance, including cross-border shopping, direct purchases, and duty-free purchases (IARC, 2008; Gallus et al., 2009). These surveys are often based on self-reports which are subject to recall bias and consequently likely under-estimated. In fact,

validity of self reports of an illegal activity such as illicit tobacco purchase remains open to discussion. However, this is less of an issue if purchase of illicit tobacco continues to be viewed not as an illegal activity in itself by purchasers.

3. **Observational Data Collection.** Products can be examined for tax stamps, local warning labels, other pack markings, and product constituents to identify the proportion of products that do not carry the appropriate legitimate product identifier or that include constituents that differ from those contained in legitimately manufactured products. Based on this methodology, a 2004 survey of the Cancer Epidemiology & Prevention Division of the city of Warsaw trained researchers to recognize Polish tax stamps, warning labels, and other pack markings, as well as for packs from the Ukraine, Belarus, and the Russian Federation in an effort to assess the extent of tax avoidance/evasion in the Polish cigarette market (IARC, 2008). This work interviewed both smokers and non-smokers (living in smoker households) about their cigarette purchases and carefully inspected cigarettes pack(s) for various markers of illegal origins including: price; foreign or missing excise tax stamps, health warning labels and/or tar and nicotine labels. An alternative to this approach is the collection of littered cigarette packs to estimate the extent of illicit tobacco trade in a jurisdiction. In Chicago, Merriman collected discarded cigarette packs in an effort to assess the extent of avoidance/evasion of the local Cook County and Chicago cigarette taxes. He reported that three-quarters of the packs collected in Chicago did not bear the Chicago tax stamp (Merriman, 2009). This methodology has been used elsewhere and been found to be congruent with estimates using other methods (Lakhdar, 2008; Wilson et al., 2009).

The tobacco industry has used the third methodology described, an observational data collection, in an attempt to measure the extent of illicit trade in tobacco products.

Tobacco company executives presented evidence from a study of cigarette packs littered around pubs, clubs, football stadiums in the UK in testimony to a UK House of Commons Treasury Committee panel studying Excise Fraud in 2005 (Chernick and Merriman, 2009). They reported that about 18 percent of the packs they examined were smuggled. Additionally, the UK Tobacco Manufacturers Association collected littered cigarette packs on various occasions outside the matches of the Liverpool football club from 2000 to 2006 and near the Newcastle horse race course in 2005 and 2006 and shared this data with UK customs officials. In both cases they found between about 25 and 40 percent of packs had avoided UK taxes (This information was supplied in a private communication from an HMRC representative of the UK Excise Office with the permission of the UK Tobacco Manufacturers Association, as cited in Chernick and Merriman, 2009).

The use of observational data collection in measuring the illicit tobacco market is said to avoid some of the technical problems that arise with the use of national aggregate data and allows for detailed analysis of the smuggling problem (Ciecierski, 2007). This is due to the fact that these methods require that levels of tax evasion be estimated based on discrepancies in observed data (e.g. the difference between tax revenues collected and smoking observed in surveys of the smoking public; Ciecierski, 2007). However, this methodology is non-representative and limited by observers' ability to distinguish between licit and illicit (particularly counterfeit) products and their constituents (IARC, 2011). Nonetheless, it does appear promising for capturing at least some aspects of tax avoidance and evasion (IARC, 2011).

The Euromonitor International is the primary source of data for the illicit trade estimates in Europe. However, it has recently been criticised for its lack of methodological transparency, its overestimation of the illicit trade of cigarettes and a

tendency to suggest that illicit trade is increasing from year to year (Blecher, 2010a). The methodology used by Euromonitor International to measure the illicit tobacco market is not known publicly and as a result it cannot be duplicated and their estimates cannot be scrutinised. Not only do all methods used to estimate illicit trade have their limitations - not all studies clearly describe their methodology or these limitations, but their data source may bias the outcome. For instance, the tobacco industry may have an incentive to overestimate the illicit tobacco market in order to advocate for reduced taxation of tobacco products. On the other hand, health professionals may have an incentive to understate the size of the smuggling problem in order to argue for tax increases. Accurate estimates of the illicit tobacco trade are therefore essential to help evaluate and establish the importance of tobacco tax revenues as well as to measure the effectiveness of governmental anti-smuggling efforts (Ciecierski, 2007).

In conclusion, a universal and effective measure of the illicit tobacco market included in the WHO Framework Convention on Tobacco Control (FCTC) is strongly recommended. This would include a universally accepted definition of illicit tobacco trade, a comprehensive step by step outline of how illicit tobacco trade should be measured (potentially using more than one approach or methodology) to get a more accurate estimate. This would ensure more reliable measures of the global illicit tobacco market and prevent the tobacco industry from publishing illicit tobacco market figures (uses methodologies that are not publicised) that support their agenda and disrupt global tobacco control policies. In the meantime, a triangulation of different data sources is advised.

2.6.2 Estimates of the illicit tobacco market

There are currently no reliable global statistics on the size of the illicit tobacco

market. In the past, estimation of the size of the illicit tobacco market has been conducted by Klynveld Peat Marwick Goerdeler (KPMG), a major accountancy and professional services firm) as part of the agreements between the EU and Philip Morris International (Joossens, 2011). In 2009, according to KPMG, total cigarette consumption in the EU was of 685 billion units and illicit trade accounted for 8.9% of total consumption (Joossens, 2011). Also in 2009, Joossens and colleagues collected latest available data on estimates of the illicit market share from 2007 or as close to this year as possible, in 84 countries which represented 85% of the world population. Data used in these studies were collected from various sources (academic articles, official government publications, estimates from market research companies, tobacco trade journal articles, newspaper articles, and estimates from personal contacts in customs organisations) with varying methodologies and, in some cases with no clearly defined methodology for accurately assessing market share (Joossens et al., 2009). The illegal market in this study referred to illegal or illicit sales and total consumption data for a country, including: the legal sales in the country + the illegal sales to its inhabitants + the legal sales to its inhabitants visiting other countries or duty free shops (in amounts allowable under customs regulations) - legal sales to non-residents passing through the country (Joossens et al., 2009). Joossens and colleagues relied on country estimates to measure the global illicit trade so as to include not only large-scale smuggling but also small-scale smuggling and illicit manufacturing, which includes counterfeit trade. Their analysis showed that 11.6% of cigarette consumption in these 84 countries in 2007 were illicit (16.8% in low income countries, 11.8% in middle income countries, 12.7% in low and middle income countries combined, and 9.8% in high income countries) and that the total annual illicit consumption in these 84 countries was approximately 657 billion cigarettes a year (533 billion in low and middle income countries and 124 billion in high income countries) (Joossens et al., 2009). This study ranked China as having the largest illicit

tobacco market in the world, with 214 billion cigarettes being illicit (Joossens et al., 2009). Additionally, Joossens and colleagues found that China had the greatest illicit trade in 2007, in line with another that states the illicit tobacco trade in China is significantly higher than other parts of the world (FCA, 2008).

The Euromonitor estimated that the illicit cigarette market had decreased from 8.5% in 1999 to 4% in 2004 (Euromonitor, 2005; as cited in FCA, 2008). This disparity highlights the difficulty in determining the exact size of the illicit tobacco market. Furthermore, the TMA stated that in 2004 190 billion cigarettes in China were smuggled, although there is no explanation as to whether smuggling referred also to counterfeit trade. With China being the biggest producer of counterfeit cigarettes it comes as no surprise that in 2006 the China State Tobacco Monopoly Administration announced that it had seized 9.07 billion counterfeit cigarettes (FCA, 2008).

2.7 Illicit tobacco trade in the UK

In the UK, tobacco smuggling became a serious problem over a decade ago. During the early 2000s the illicit market share of genuine UK brands among smuggled cigarettes stood at approximately 21% (this excluded legal cross border shopping) (HMRC, 2006; West et al., 2008; Joossens and Raw, 2008). In 2007/08, counterfeit cigarettes accounted for 47% and counterfeit RYO tobacco for 36% of large seizures (millions of cigarettes) of UK brands and it is believed that the bulk of these were manufactured in China. At this point the illicit tobacco market share was estimated at 13% for manufactured cigarettes and 50% for RYO tobacco (HMRC, 2011c). Recent figures in 2010-11 suggest a decrease to 9% of cigarettes and 38% of RYO tobacco being illicit; from 10% of manufactured cigarettes and 46% of RYO in 2009-10 (HMRC, 2012b).

The UK illicit tobacco market experienced an influx of non-UK brands (cheap whites) from 2007-8 as they began to represent a significant share of the illicit market. By 2008-9, seizures of genuine UK tobacco brands had fallen to only 6% of large scale seizures by HMRC, whereas 44% were of non-UK illicit brands (HMRC, 2011a). This increased to 46% of large scale seizures in 2009-10 (HMRC, 2011a), suggesting an increased demand for these products as they established a market in the UK.

2.8 Conclusion

This literature review illustrates the nature and extent of the illicit tobacco trade globally and more specifically in the UK. The existence of the illicit tobacco market creates a range of problems such as encouraging criminality, exacerbating health inequalities, costs to the government in lost revenue and undermining tobacco control policies such as tax increases on tobacco products. Global estimates of illicit tobacco trade are limited and suffer from methodological issues. A significant limitation of global estimations of illicit tobacco trade is their focus on cigarettes, with no accounts for illicit RYO tobacco. In addition, these estimates are usually based on large scale smuggling, with no consideration for other types of illicit tobacco, i.e. bootlegged and counterfeit. Consequently, it is unlikely that these estimates are accurate and show the true extent of illicit tobacco trade. It is essential that reliable estimates of the illicit tobacco market are produced not only to evaluate the effectiveness of the policies to combat illicit tobacco trade, but also enable accurate measures of tobacco price elasticity.

This review also highlights gaps in the literature which need to be addressed. For instance, the illicit trade, by its very nature, is a hidden activity so prevalence data tend to be estimates. This suggests the need to utilise a number of different data

sources to allow for continual cross-validation of trends in illicit tobacco use and to ensure policy decisions are based on the most accurate assessment of the effectiveness of anti-illicit trade policies. Currently, in the, UK the only routinely collected data on illicit tobacco use is provided by HMRC. Therefore, there is a need for additional methodologies to enable the cross-validation of HMRC measures, such as surveying smokers' purchase behaviours. Illicit sources and the purchasing behaviours of smokers who engage in this illegal activity need to be routinely investigated so as to pick on any trends or changes in illicit tobacco trade. There is also very limited literature to show the reported price paid for counterfeit, smuggled or bootlegged tobacco and cigarettes in the UK. This is important in order to measure the affordability and price elasticity of all tobacco products.

Finally, due to the ever changing nature of the illicit tobacco market, it is vital that this illegal activity be routinely monitored in order to reveal new trends and changes to enable governments to be better addressed on the methods applied by criminals involved in this trade.

CHAPTER 3

ILLICIT TOBACCO TRADE POLICY RESPONSES

3.1 Introduction

According to experts, eliminating illicit tobacco trade globally would result in more than 164,000 avoided premature deaths a year and at least \$31.3 billion a year gained in revenue (Joossens et al., 2010). In the UK, it is estimated that in the absence of illicit tobacco, the price of tobacco would be 11.7% higher overall which would result in 4.3%-8.3% lower consumption and ultimately prevent at least 3,400 fewer deaths per year (West et al., 2008).

Illicit tobacco trade is dynamic in nature and so requires a comprehensive approach that focuses on the immediate and future threats of this trade (Joossens, 2011). According to an extensive review of the effectiveness of policy measures to tackle illicit cigarette trade conducted by Sweeting and colleagues, the type of illicit trade and means of distribution influence the effectiveness of different policies and the unintended consequences of action (Sweeting et al., 2009). For instance, policy measures that may have been effective in the 1990s for legitimately manufactured cigarettes smuggled across borders would be less effective for the illicitly manufactured and counterfeit cigarettes that are more prevalent in many countries today (Sweeting et al., 2009). This raises an important issue for policymakers to continue to evaluate policies implemented to tackle the illicit tobacco trade to ensure that they stay effective in light of the changing nature of this illegal trade. This chapter reviews the various policy responses (both national and international) to combat the illegal trade of tobacco products.

3.2 International policy responses

3.2.1 World Health Organisation (WHO) Framework Convention on Tobacco Control (FCTC) Illicit Tobacco Trade Protocol (ITP)

The WHO FCTC is the world's first treaty on tobacco control and was developed in response to the globalisation of the tobacco epidemic. The treaty was developed and opened for signatories on 21 May 2003, with the UK being one of the signatories. The framework came into force on 27 February 2005 with its stated objective to "protect present and future generations from the devastating health, social, environmental and economic consequences of tobacco consumption and exposure to tobacco smoke by providing a framework for tobacco control measures to be implemented by the Parties at the national, regional and international levels in order to reduce continually and substantially the prevalence of tobacco use and exposure to tobacco smoke" (WHO FCTC, 2005). A significant part of achieving this objective, would involve the tackling of the illicit tobacco market. Article 15 of the FCTC commits parties to implement measures to address all forms of illicit trade in tobacco products, including smuggling, illicit manufacturing and counterfeiting (WHO FCTC, 2005).

The illicit tobacco trade is global and thus requires a coordinated international response to make a lasting impact. The FCTC ITP is the global response of the global tobacco control community. The protocol was drafted and negotiated by an Intergovernmental Negotiating Body (INB), commissioned to undertake this work by the FCTC Conference of Parties (COP) at its second session in 2007 (WHO, 2007). In February 2008 negotiations started on the protocol and the second meeting of the INB took place on the 20th October 2008 in Geneva (WHO, 2008b). More than 160 Parties to the FCTC met four times between 2008 and 2010 to negotiate an international treaty to combat the illicit trade in tobacco products. After four years of negotiations, the INB held its fifth and final session between 29 March and 4 April 2012 in Geneva. The text on the draft

protocol was then submitted to the fifth session of the COP for consideration and adoption. This took place on 12–17 November 2012 in Seoul, Republic of Korea. Here, more than 140 Parties to the WHO FCTC adopted the illicit tobacco trade protocol, making it the first protocol to the WHO FCTC and an international treaty (WHO, 2013).

The next steps to the implementation of this protocol are:

- Protocol open for signature by the Parties for one year, starting 10 January 2013
- Ratification process, according to national law
- Entry into force (90 days after 40 ratifications)

It is claimed that this protocol, if implemented in the UK would result in £5.7 billion gained in revenue and 760 premature deaths averted each year (Johnson, 2010). Furthermore, if the illicit cigarette trade were eliminated, high income countries stand to gain \$13 billion in revenue, for middle and low income countries this would be \$18.3 billion (Joossens et al., 2010). In addition, it is claimed that from 2030 132,000 lives a year will be saved in low and middle income countries and 32,000 in high income countries (Joossens et al., 2010). In 2011 the UK Coalition Government in its tobacco control strategy publication – *Healthy Lives, Healthy People* outlined its support for the development and adoption of the WHO FCTC protocol on illicit tobacco trade (Department of Health (DH), 2011).

In the period of negotiations on the FCTC ITP, experts proposed that enforceable measures to control the supply chain and international cooperative measures, including information sharing and cooperation in the investigation and prosecution of offences, should be at the heart of the protocol (Joossens and Raw, 2012). In addition, it was considered that these measures facilitate investigations into smuggling operations and make the industry liable for controlling the supply chain (Joossens and Raw, 2012). The illicit tobacco trade protocol calls for all parties to work towards an elimination of the

illicit trade in tobacco products by:

- a. Monitoring and collecting data on cross-border trade in tobacco products (including illicit trade) and exchanging information among customs, tax and other authorities;
- b. Enacting or strengthening legislation with appropriate penalties and remedies against illicit trade in tobacco products, including counterfeit and contraband cigarettes;
- c. Taking appropriate steps to ensure that all confiscated manufacturing equipment, counterfeit and contraband cigarettes and other tobacco products are destroyed;
- d. Adopting and implementing measures to monitor, document and control storage and distribution of tobacco products held or moving under suspension of taxes or duties within its jurisdiction;
- e. Finally, adopting measures as appropriate to enable the confiscation of proceeds derived from the illicit trade in tobacco products.

A core measure of the protocol and perhaps the single most important provision of the ITP is Article 8, relating to the "**tracking and tracing**" regime. This is because it offers governments and enforcement authorities a relatively simple means to monitor tobacco products throughout their supply chain, verifying that they are genuine, that tax has been paid in the appropriate jurisdiction, and that the product has not been diverted into illicit markets. According to Article 8 of the ITP, "tracking and tracing" consists of the "systematic monitoring and re-creation by competent authorities or any other person acting on their behalf of the route or movement taken by items through the supply chain" (WHO, 2013). This measure requires each party to ensure that unique, secure and non-removable identification markings, such as codes or stamps, are affixed to or form part of all unit packets, packages and any outside packaging of cigarettes within a period of five years and other tobacco products

within a period of ten years of entry into force of the Protocol (WHO, 2013).

The tracking and tracing system is regarded as more than the unique, secure and non-removable identification markings on the packages of tobacco products (Joossens and Raw, 2012). Additionally, it implies reading or scanning the codes, linking the codes between packs, cartons, master cases and pallets, uploading the information to a database, recording of any shipping and receiving events along the supply chain and interconnecting the different databases (Joossens and Raw, 2012). The main objective of the tracking and tracing regime is thought to be the facilitating of investigations into tobacco smuggling only (i.e. not for bootlegging or counterfeiting) and to identify the point where tobacco products are diverted to an illicit market (Joossens and Raw, 2012). Thus, experts believe that in order for this approach to be effective it would need to be implemented at an international level, rather than each entity developing its own domestic system, in order to ensure that tracking and tracing across borders could be facilitated (Joossens and Raw, 2012).

Although so far there is no such global and comprehensive tracking and tracing regime in tobacco control, there are partial tracking & tracing systems already in existence. The first of these systems was introduced in Brazil in 2007 and included a control and monitoring system involving a digital tax stamp system, with capability of identifying each individual cigarette pack (Joossens, 2011). This digital stamp system featured a unique, covert code with data for each cigarette pack and contained product data for each cigarette pack. These data are then uploaded to a Data Manager Server under the control of the Brazilian Ministry of Finance. The stamps were also encrypted with the following information: the name of the manufacturing site, the date the stamp was validated and the tax category of the stamp (Joossens, 2011). In 2011, the Brazilian control and monitoring system was

updated to require that every pack of cigarettes produced in Brazil for export needed to be marked with a unique identification code at the production lines to determine the origin of the products and to control their movements (Normative Instruction 1155, cited by Joossens, 2011). Additionally, enforcement officials are now able to see a numeric code on the packs with a data matrix reader and have access to information (such as date and place of manufacturing, country of destination etc.) to trace the pack (Joossens, 2011).

The second of these partial tracking & tracing systems already in existence is that developed, owned and patented by Phillip Morris International (PMI) known as "**Codentify**" (Joossens, 2011). Codentify is a unique encrypted 12-character number code on individual cigarette packs, initially developed with the goal of verifying a products authenticity (whether a product is legitimate or counterfeit) (Joossens, 2011; Joossens and Gilmore, 2013). The code holds information about the place of manufacture, the machinery, date and time of production and brand; however this information is not linked to the unique coding of the cartons or master cases. PMI collaborated with Japan Tobacco International (JTI), British American Tobacco (BAT) and Imperial Tobacco Limited (ITL) to promote codentify as the industry standard for track and trace and digital tax verification. However, this is questionable, considering that PMI initially developed codentify to verify a products authenticity (i.e. whether it is legitimately manufactured or counterfeit) and not for tax verification as the track and trace system requires (Joossens and Gilmore, 2013). Moreover, the adoption of a single industry standard to replace tax stamps with a digital tax verification system based on PMI's codentify technology is controversial. Firstly, because it is rightly believed that tax verification should remain an exclusive proficiency of governments, and not of the tobacco industry (Joossens and Raw, 2012). Secondly, codentify is not part of the recorded data for the tracking and

tracing regime as the data collected are incomplete and not stored throughout the supply chain (Joossens, 2012). Lastly, a review of industry documents uncovered some limitations of codentify as a tax verification system. For instance, codentify does not store the codes or register events after the product is manufactured, thus it cannot determine whether a product has entered an illegal distribution route and so is not a track and trace standard (Joossens and Gilmore, 2013). However, given the limited technical and financial support available for the implementation of the FCTC ITP, it is likely that the tobacco industry will be successful in promoting codentify. Experts however warn that if this system is to be implemented, independent and regular audits are essential to guarantee the validity of the system (Joossens and Raw, 2012).

3.2.2 Challenges to the FCTC Illicit Tobacco Protocol

There is concern that certain aspects of the FCTC ITP are subject to challenges that would need to be addressed by the COP if the protocol is to be implemented effectively. Firstly, the protocol will only be as strong as the weakest link in the parties signed on to this treaty as it is evident that there are large differences in technical capacity between customs and enforcement authorities in different regions of the world (Joossens and Raw, 2012; Sy, 2012). This will no doubt impact on the effectiveness of the track and trace strategy to tackle the illicit tobacco supply chain. Therefore, it may be necessary to provide some technical assistance to low-income countries in order to ensure the protocol is successfully implemented at the global level (Joossens and Raw, 2012; Liberman et al., 2012). In addition, it has been suggested that financial support for developing countries would need to be provided (Sy, 2012). Secondly, it has been argued that the protocol on illicit tobacco trade if not properly linked to the international customs, law enforcement and criminal justice architecture will probably do little to tackle the underlying causes of illicit

trade such as: under-resourced customs, law enforcement and criminal justice agencies; lack of capacity to enact, monitor and enforce legislation and regulations; weak governance systems; corruption and lack of technological capacity (Lieberman et al., 2012). These will need to be discussed with parties who ratify this protocol.

Thirdly, with any policy implementation, availability of sufficient resources to undertake all aspects of the policy is a challenge. It is clear that effective implementation of the illicit tobacco trade protocol will require significant financial and technical resources. There is concern that resources may be diverted from other areas of FCTC implementation, in which the FCTC Secretariat and WHO do have well-established institutional expertise (Lieberman et al., 2012; Joossens and Raw, 2012). Hence, there is the need to devise appropriate arrangements and parameters for cooperation with other intergovernmental organisations to ensure that resources are efficiently and effectively assigned (Joossens and Raw, 2012). In the absence of sufficient resources for implementation of the illicit tobacco trade protocol, the COP should be aware that the tobacco industry is likely to offer funding to governments to collaborate on protocol implementation (Lieberman et al., 2012). In consideration of Article 5 of the FCTC the COP are advised to be cautious and only partner with the tobacco industry in a manner that does not contravene the FCTC. Thus it is believed that if there is to be cooperation between governments and the tobacco industry in tackling illicit trade, facilitated by an intergovernmental organisation, consideration needs to be given to what is the appropriate role for the FCTC Secretariat and/or WHO and what is best handled by other intergovernmental organisations (Lieberman et al., 2012). In spite of the tobacco industries' view that: 'Tackling illicit trade requires co-operation and understanding between legitimate tobacco companies, governments and organisations such as the World Customs Organisation, World Trade Organisation and World Health Organisation' (BAT, 2013b), the FCTC is

called to remain health focused and its public health policy interests easily recognised and irreconcilable with the tobacco industry's interests (Joossens and Raw, 2012).

3.2.3 European Union (EU) agreements with the Tobacco Industry

The European Commission (EC) in November 2000, filed a civil action against Phillip Morris International (PMI), RJ Reynolds (RJR) and Japan Tobacco International (JTI) accusing these tobacco companies of "an ongoing global scheme to smuggle cigarettes and among other things for conducting illegal trade with terrorist groups and state sponsors of terrorism" (Joossens and Raw, 2008). In 2004 the case against PMI was dropped by the EC in return for an enforceable and legally binding agreement which obligated PMI to pay the EC \$1 billion over 12 years (Europa press release Payments by PMI 2006, cited by Joossens and Raw, 2008). This agreement demanded PMI control future smuggling through a range of measures, which included controlling the distribution system and contractors supplied, and implementing a tracking and tracing system (Joossens and Raw, 2008). In 2007 JTI signed a similar EU agreement in (Framework Convention Alliance, 2008). By 2009, all 27 EU Member States had signed the EU-PMI agreement. In 2010 BAT and Imperial Tobacco followed suit (European Commission, 2010).

These agreements resulted in reduced levels of smuggling of well known brands. Notably, cigarette smuggling in Spain and Italy decreased from approximately 15% of consumption in the 1990s to 1–2% of consumption in 2006 (Joossens and Raw, 2008). In both countries, cutting off supply from the major tobacco companies to the illicit market was a key factor in reducing smuggling (Joossens and Raw, 2008).

3.3 Illicit tobacco trade policy responses in the UK

Combating the illicit tobacco trade in the UK is presently the mandate of Her Majesty's Revenue and Customs (HMRC) - the national enforcement agency tasked with revenue collection. Its anti-smuggling measures have consisted of: scanners for container detection, prominent fiscal marks on cigarette packs, increased punishment for smugglers, more customs officers and a campaign to increase public awareness (HMRC, 2006; HMRC, 2011a).

3.3.1 Memorandum of Understanding (MoU) agreements with the Tobacco Industry

In the UK, HMRC co-operates with the tobacco industry to combat illicit tobacco trade. The goal of the Memoranda of Understanding (MoU) agreement was set up a framework for cooperation between HMRC and the tobacco industry to tackle the smuggling of tobacco products. The MOU was strengthened in 2006 to include hand-rolled tobacco (RYO) (HMRC, 2006). Tobacco companies who fail to take sufficient steps to prevent their products being smuggled into the United Kingdom risk facing fines of up to £5 million under this agreement (Joossens and Raw, 2008). The MOU agreement is extensive, but outlined below are some of the objectives of the agreement (ASH, 2006):

- a. Tobacco companies will provide HMRC with source-market specific sales data on request for UK-Sensitive brands (defined as those brand variants which have a significant presence in the UK illicit market).
- b. Tobacco companies will share with HMRC on an annual basis their understanding of domestic and legitimate cross-border consumption for each tobacco product and brand in the intended destination market of its international sales.
- c. Tobacco companies will consult with HMRC to identify and analyse smuggling

risks before entering UK-sensitive brands into new markets.

- d. Tobacco companies, when required, will make available to HMRC source-market specific data relating to current approved market distributors, proposed new market distributors and any discontinued market distributors for those brands.
- e. Tobacco companies will provide reasonable assistance to HMRC in its efforts to identify all smuggled product, and track down the smugglers with the overall objective of reducing further or eliminating this unlawful trade.
- f. Tobacco companies will advise HMRC based on specific intelligence and trend analysis of how, and from where, counterfeit products are being supplied into the European Union and other markets.
- g. HMRC will notify the tobacco companies within 15 UK working days of any material seizures it may make of tobacco products bearing the company's trademarks.
- h. HMRC will allow tobacco industry access to inspect the seized product within 15 UK working days of notification of seizure, and to select random samples of the seized product for examination.

The MOU, being a non-binding agreement, relies heavily on the goodwill of both HMRC and the tobacco companies in order to be effective. For instance, although Gallaher were first to sign the MOU in April 2002, 690 million Gallaher cigarettes were seized by UK Customs between 2002 and 2006 (Joossens and Raw, 2008). In addition, the weakness of the MOUs was acknowledged by the enacting of the UK Finance Act 2006 which makes it a legal duty for tobacco manufacturers to not facilitate smuggling. Nonetheless, there is evidence that the memorandum of understanding may have been effective in curbing the smuggling of tobacco products. In 2002-3, 31% of cigarettes seized by HMRC were legitimate UK brands,

however by 2009-10 this had decreased dramatically to only 6% (HMRC, 2011a).

3.3.2 Her Majesty's Revenue and Customs strategies

In 2000, the illicit tobacco market share in the UK was on the rise, with more than one in five cigarettes smoked in the UK being smuggled and this predicted to rise to one in three cigarettes within a few years (HMRC, 2000). The UK government responded with a series of measures aimed at disrupting this strong upward trend. These included:

- a. Investing an additional £209 million to fund 1,000 more frontline and investigative staff. The goal was to disrupt the supply chain by conducting more blitz exercises, with improved intelligence (by posting more Fiscal Liaison Officers overseas) to optimise interception rates and target major inland distribution.
- b. The conduction of investigations geared to maximise disruption of supplies at import and key distribution points to increase the number of seizures.
- c. Extra resources in the form of staff and technological (x-ray scanners to detect high volume cigarette smuggling in freight) were invested to enhance the vigour and scope of enforcement efforts and achieve the step change in interception rates necessary. Compulsory marking of UK duty-paid tobacco products.
- d. Targeted measures to apply effective penalties to those caught involved in the distribution of illicit tobacco with the emphasis of preventing supplies of illicit supplies seeping into the legitimate market. Where retailers were caught making illicit supplies, better use was made of civil recovery and related economic penalties.
- e. Increased emphasis on asset confiscation to remove the economic rewards of smuggling. This involved the employment of more investigative staff in the National Investigation Service located at offices around the country.

- f. Financial investigations were conducted as part of all large scale smuggling/distribution cases, to ensure assets were identified and Confiscation Orders obtained.
- g. Collaborative working with other UK agencies both domestically and abroad, notably the intelligence agencies, the police, the Inland Revenue and the Benefits Agency were.

Between the start of the above strategy and 2006, HMRC reported over 7 billion cigarettes and 769 tonnes seized overseas (en route to the UK), at airports and inland, at seaports and cross channel passenger seizures (HMRC, 2009). A total of, 270 criminal gangs involved in illicit in the large-scale smuggling and supply of illicit cigarettes were disrupted and 1,226 people were successfully prosecuted and £23 million worth of Confiscation Orders were issued (HMRC, 2009). Moreover, the illicit cigarette market share decreased from 21% in 2000 to 16% in 2005-06 and the illicit hand rolled market from 60% to 57% (HMRC, 2006; HMRC, 2009; HMRC 2011c).

In 2006, HMRC in the bid to improve on their above successes announced new measures to further strengthen the aforementioned strategy (HMRC, 2006). In their report - *New responses to new challenges: reinforcing the tackling tobacco smuggling strategy* these measures were outlined and consisted of:

- a. Collaborating with tobacco manufacturers to improve the targeting of counterfeit products (which had become an increasing threat) and further restriction of the supply of both genuine hand rolled and cigarettes. This involved the signing of new revised and reinforced MoU agreements with UK tobacco manufacturers. It was supposed that this will restrict the availability of cigarettes and for the first time hand rolled tobacco to smugglers.

- b. The Finance Bill 2006, which was introduced to complement the MoUs. This bill was implemented to prevent organised gangs from exploiting weaknesses in supply chains for tobacco products.
- c. Enhancing HMRC's operational response in order to strengthen enforcement at all the key points along the supply and distribution chain. This involved the employment of 200 extra staff to focus on hand rolled tobacco and a further 30% increase in the network of Foreign Liaison Officers. In addition, HMRC sought to improve the analysis of domestic and international markets using independent and industry data to assess evidence of weakness in hand rolled tobacco supply chains.
- d. Additional investigation teams deployed in regions of highest risk and increased anti-smuggling resources at entry points which presented the highest risk of hand rolled tobacco smuggling.
- e. Intelligence building in the UK and overseas which involved the development of tactical and specific intelligence to identify and target the major criminal gangs operating in the UK.
- f. Extension and development of contacts with overseas agencies to identify and target overseas based criminal gangs.
- g. Investment in technology to detect smuggled tobacco outside of the main freight channels. In the South East of HMRC an Electronic Freight Targeting System was used to effectively target Roll-on and Roll-off traffic and unaccompanied freight.
- h. For the first time engagement and communication with the public was part of HMRC's anti-illicit tobacco strategy. This consisted of increasing awareness of HMRC's enforcement action and to undermine the appeal of smuggled product to current and potential consumers. The goal was to undermine smokers' confidence in 'cheap cigarettes' by highlighting the dangers of smoking counterfeit cigarettes and alienate the public from those who sell them. HMRC's presence was advertisement at UK airports and seaports to ensure warnings to businesses and the general public

of the risks of smuggling remained high profile. In addition, HMRC's confidential hotline was advertised for members of the public with knowledge or suspicions of smuggling to report it.

The implementation of HMRC's new responses to illicit tobacco trade outlined above appeared to have little impact on their seizure rates. Between 2005-6 and 2008-9, the number of reported seizures of cigarettes decreased from 2 billion in 2005-6 to 1.8 billion in 2008-9 (HMRC, 2009). However, the targeted measures on hand rolled tobacco appeared to pay off, with 228 tonnes of seized in 2007-7, an increase from 160 tonnes in 2005-6 (HMRC, 2009). Similarly, the number of people successfully prosecuted increased from 262 in 2005-6 to 299 in 2006-7 and 290 in 2007-8. The amount of Confiscation Orders issued increased from £3.18 million in 2007-7 to £6.78 million in 2007-8, but decreased to £2.4 million in 2008-9 (HMRC, 2009). Nonetheless, the illicit cigarette market share decreased from 16% in 2005-6 to 13% in 2008-09 and the illicit hand rolled market from 60% to 50% (HMRC, 2011).

In November 2009 as part of the continued fight against illicit tobacco trade, HMRC announced their collaboration with the UK Border Agency (UKBA) in the report - *Tackling tobacco smuggling together*. This integrated strategy was focused mainly on the combining of the strengths of the UKBA and HMRC in intensifying the measures already in place, in order to deal with existing and emerging threats such as counterfeit tobacco and 'cheap whites' (HMRC, 2009). In addition, this strategy placed more emphasis on the need to also address demand for illicit tobacco through media campaigns (HMRC, 2009). These campaigns were aimed at increasing awareness of enforcement action and penalties, undermining the attractiveness of illicit tobacco to consumers and encouraging the public and business to report

information on the illicit market (HMRC, 2009). Although similar to that outlined in their previous strategy, this strategy announced a Department of Health (DH)/HMRC illicit tobacco marketing strategy (HMRC, 2009).

In April 2011, HMRC announced its renewed strategy to combating the illicit trade of tobacco products in response to the changing nature of the illicit tobacco market in the UK (HMRC, 2011a). This strategy benefited from the additional £917 million investment in tackling organised crime, tax evasion and avoidance (HMRC, 2011a). This latest strategy consisted of:

- a. Targeting and disrupting the organised criminal organisations behind illicit tobacco trade by expanding tobacco criminal intelligence and investigation capacity by 20%.
- b. Greater volumes of illicit tobacco seizures in order to undermine the economic benefits of this trade.
- c. Increased hard-hitting action against offenders to act as a deterrent against getting involved in this illegal trade. It is proposed that this will be achieved by increasing the likelihood that perpetrators are caught and prosecuted.
- d. Reducing the availability of genuine tobacco products in the illicit market by supply chain controls through (but not restricted to) building on the EU anti-smuggling agreements with the tobacco industry and refreshing the memoranda of understanding.
- e. Decreasing demand for illicit tobacco products by developing comprehensive marketing strategies through collaboration with the Department of Health, Action on Smoking and Health and the North of England illicit tobacco programme.
- f. Collaborating with overseas partners and international organisations through the signing of the WHO FCTC illicit trade protocol.

- g. Working with the tobacco industry to better understand the illicit market in the UK and improve consumers' awareness and knowledge of illicit tobacco products.

The impact of the above renewed strategy is not yet known as presently, figures on HMRC's seizures and the illicit tobacco market share for the year 2011-12 have not become available. However, it is hoped that this renewed strategy would achieve sustainable downward pressure on the illicit market in cigarettes and hand-rolling tobacco up to 2015 (HMRC, 2011a).

3.4 Regional policy responses

As part of the UK tackling illicit tobacco strategy, joined-up marketing and multi-agency enforcement is viewed as essential to tackling this issue (HMRC, 2011). The *"North of England Tackling Illicit Tobacco for Better Health Programme"* is a unique initiative combining the use of marketing and enforcement across different agencies to tackle the illicit tobacco market. Agencies partnering in this programme include the Police, Trading Standards, Licensing Officers and HMRC. The North of England programme initiated a comprehensive approach to tackle the demand for and supply of illicit tobacco in communities through the development of partnerships between health and enforcement professionals. The programme consists of groundbreaking social marketing campaigns aimed at changing social norms around illicit tobacco purchase, generating and sharing intelligence and delivering enhanced enforcement against the illicit tobacco trade. The North of England Illicit Tobacco Programme is explored in more detail in Chapter Five of this thesis.

3.5 Local community responses

Addressing illicit tobacco trade at the local level is just as important as tackling it at

the international level, if its use is to be curbed successfully. This would require clear leadership by health and enforcement partners, as well as local authorities. A study of the sale of counterfeit cigarettes in Islington, London discovered that the local council, police and the Primary Care Trust (PCT) were well aware of the issue and had concerns which lead to the development of a joint strategy (McEwen and Strauss, 2009). This was in the form of an awareness campaign (through the local press) aimed at informing the public of illicit tobacco trade, followed by a week of high enforcement and prosecutions (McEwen and Strauss, 2009). There is no evidence of the exact impact this short-lived intervention. However, it is likely that it may have had a short term effect of removing illicit traders, who in fear of persecution would have relocated to other areas of London to continue their trade.

The tackling of illicit tobacco trade at the local level would require a longer term commitment by stakeholders (Trading standards, local authority, local police and PCTs) in order to have a discernible impact on illicit tobacco trade.

3.6 Conclusion

There is clear evidence from certain countries that the illicit tobacco trade can be tackled successfully (Joossens et al., 2010). In the last decade illicit tobacco market share fell from about 21% to 9% in the UK, and from about 15% to 1–2% in Italy and Spain (Joossens et al., 2010; HMRC, 2011). In all three instances smuggling was reduced by interrupting the supply chain from the manufacturers to the illicit market. In addition, international cooperation was also critical to tackling the illicit market. Thus, it is the opinion of experts that enforceable measures to control the supply chain, international cooperative measures including information sharing and cooperation in the investigation and prosecution of offences continue to be an essential part of any strategy to tackle the illicit trade of tobacco products (Joossens

et al., 2010). In addition, any part played by the tobacco industry in controlling the supply chain should continuously be monitored (Joossens et al., 2010).

In the UK, although HMRC continues to see some success in their efforts, a recent audit of their anti-illicit tobacco trade strategies raised some concerns regarding its measures that it is important that this is addressed. The National Audit Office (NAO) in their report on the progress in tackling smuggling, branded HMRC's renewed strategy as 'having made progress in meeting its objectives, but that performance fell short of internal targets in 2012-13 (NAO, 2013). It was also the opinion of the NAO that HMRC's approach to deterring and disrupting the illicit market within the UK was not effectively integrated (NAO, 2013). This audit's findings brings to the forefront the importance of reviewing HMRC's measures on tackling illicit tobacco trade, how it assesses the effectiveness of its strategies and whether there is need for a revised approach.

Although the WHO FCTC illicit trade protocol and the UK illicit tobacco strategies focus mainly on the supply side of the illicit tobacco trade, it is important that policies to tackle this complex issue are multi-faceted. Addressing demand for as well as supply of illicit tobacco is likely to be crucial in guaranteeing a lasting impact on tackling illicit tobacco use. This may be particularly important in deprived communities where smoking is ingrained in their culture and smokers are more addicted to tobacco. Experts believe 'the key to curbing illicit tobacco trade is cutting off the supply – 'turning off the tap' (Joossens and Raw, 2003; Joossens and Raw, 2008). It is important that this strategy is wedded with tackling the demand for cheap tobacco products. Therefore, a protocol that targets supply and demand (promotion of stop smoking services, especially in deprived communities and changing behaviour), and media campaigns encouraging smokers to quit could have

more success in tackling the illicit tobacco trade. There are others who share this sentiment that the most effective means of reducing illicit trade is to reduce the demand for cigarettes itself (Blecher, 2010).

CHAPTER 4

MIXED METHODOLOGY APPROACH TO RESEARCHING ILLICIT TOBACCO TRADE

4.1 Introduction

This PhD studentship was designed as a piece of applied health policy research and involved the use of mixed methods (qualitative and quantitative). The illicit trade in tobacco products by its nature is complex, involving health, tax revenue and criminality. For that reason, a mixed methods research approach was deemed most appropriate to ensure a comprehensive investigation of illicit tobacco use, which one research approach alone could not have accomplished. This chapter outlines the strengths and limitations of employing a mixed methodology in assessing illicit tobacco use. In addition, the qualitative and quantitative methods used in this research are discussed.

4.2 Mixed methods approach

Mixed-methods research (also known as the third methodological movement) is when both qualitative and quantitative methods are combined in a single programme of inquiry (Creswell and Clark, 2011). The use of mixed methodologies has been discussed and applied in a wide range of disciplines and topic areas, such as Health Services Research (HSR), Social and Behavioural research, Psychotherapy, Medical Education, Palliative Medicine and Clinical Psychology (O’Cathain et al., 2007; Tashakkori and Teddlie, 2010; Bishop et al., 2010; Bindiganavile et al., 2013; Phillips and Lazenby, 2013; Kellett and Hardy, 2013). However there is little information about how commonly it is used, and why and how it is used in practice (O’Cathain et al., 2007). The field of mixed methodology has evolved as a result of

discussions and controversies surrounding quantitative and qualitative methods hence it is viewed as a pragmatic way of using the strengths of both approaches (Tashakkori and Teddlie, 2003). Justifications for using a mixed methods approach have usually been related to the need for comprehensiveness (O’Cathain et al., 2007). Researchers have pointed to the complexity of health care and the need for a range of methodologies to understand and evaluate these complexities (Pope and Mays, 1995; McDowell and MacLean, 1998; Bradley et al., 1999; Campbell et al., 2000). However, there are many other justifications for using mixed methods research, apart from comprehensiveness, such as: increased confidence in findings and developing or facilitating one method by guiding the sampling, data collection or analysis of the other (O’Cathain and Thomas, 2006; O’Cathain et al., 2007).

The use of mixed methods has been criticised by paradigm ‘purists’ who believe that compatibility between quantitative and qualitative methods is impossible due to the incompatibility of the paradigms underlying these methods (Teddlie and Tashakkori, 2003). However, research using mixed methods can uncover novel causal factors, can open new areas of research, and can result in more flexible and holistic thinking about health (Curry et al., 2013). In recent years the use of mixed methods have become increasingly common and is viewed as valuable in health service research when the complementary strengths of qualitative and quantitative approaches can characterize complex phenomena more fully than either approach alone (O’Cathain et al., 2007; Wisdom et al., 2012). Moreover, interest in mixed-methods studies is growing among funders, as evident in recent calls for proposals using this methodology (Curry et al., 2013).

The illicit tobacco trade is a complex phenomenon and to research this effectively, a mixed method approach appeared warranted. This would allow for a comprehensive

understanding of this illegal activity, gain insights into potential new developments in the trade and develop complete quantitative measurement processes (Curry et al., 2009). In addition, this approach would generate more extensive estimates as well as insight into the illicit tobacco trade in England. In the current PhD research one of the qualitative components sought to build on the quantitative findings and further explore and better understand smokers' use of illicit tobacco. In addition, a sequential exploratory strategy was applied in which the qualitative component was followed by a further quantitative component (Creswell, 2008; Curry et al., 2013).

4.3 Quantitative method: Cross-sectional study

Cross sectional studies are commonly adopted to measure the prevalence of a particular outcome in a population at a point in time or over a short period (Bailey et al., 2005). In addition, they are useful for investigating associations between an outcome and other factors (Bailey et al., 2005). Cross-sectional studies have a number of advantages over other study designs including being relatively inexpensive to conduct; allowing for many outcomes to be assessed, useful for public health planning and evaluation, understanding risk factors and for the generation of hypotheses (Levin, 2006). A major limitation of cross-sectional studies is the inability to make causal inference (Levin, 2006). In addition, cross-sectional studies only give a snapshot of the outcome at a particular time and so may provide differing results if another time-frame is used (Levin, 2006); events may also be subject to recall bias of the study participants (Oleske, 2009).

The Smoking Toolkit Study (STS) – A national survey of smoking characteristics was the cross-sectional survey used in the current research. The STS allows for the monitoring of the effect of the implementation of certain tobacco control policies implementations. In addition, it provides regular, detailed up-to-date information on

smoking patterns (such as prevalence, cessation, motivation to quit and harm reduction) which other major national surveys such as the General Lifestyle Survey (GLS), the Health Survey for England (HSE) and Office for National Statistics (ONS) currently fail to do (Table 4.1).

Table 4.1 Comparison of national tobacco control surveys in England

Survey	Sampling	Frequency of data collection	Tobacco control parameters measured
General lifestyle Survey (GLS)	Nationally representative household surveys across the UK. N = ~ 14,500 adult smokers and non-smokers.	Annual, smoking data collected since 1974. From 2005, respondents followed-up for 4 years, with ~25% replaced each year.	Smoking prevalence; cigarette consumption; cigarette type; cigarette dependence; tar yield; age started smoking; desire to quit; demographics.
Health Survey for England (HSE)	Nationally representative household surveys across England. N = 5000-15000 adults smokers and non-smokers.	Annual, since 1991. No follow-up.	Smoking prevalence; cigarette consumption; cigarette type; cigarette dependence; salivary cotinine (biochemical indicator of cigarette smoke intake); focus in 2007 on Smokefree legislation.
Office for National Statistics (ONS)	Nationally representative household surveys across the UK. N = ~1,800 adult smokers and non-smokers.	Monthly, since 1990. Basic smoking questions asked routinely in 2 months each year. Additional smoking questions included when requested.	Varies month-to-month and year-to-year: smoking prevalence, dependence, behaviour, and habits. Previous questions covered: attitudes towards smoking, quitting, and smoking restrictions; awareness of health-risks; attempts to quit; demographics.
Smoking Toolkit Study (STS)	Computer – assisted nationally representative household surveys across England. N = ~1,800 adult smokers in England.	Monthly, since 2006. Three and six monthly follow-up until 2010 when the three month follow-up was discontinued due to budget constraints.	Smoking prevalence; nicotine dependence; cigarette consumption; route to quit (including motivation to quit, triggers of quit attempts, barriers to quitting, attempts to quit, methods of quitting - pharmacological and behavioural aids and success at quitting); motivation to smoke, harm reduction; socio-demographics; other potential moderators. Possible to add specific questions to address particular

Information on participant recruitment and data collection procedures in the STS are detailed overleaf.

4.3.1 STS study design and sampling

The STS collects detailed information on a wide range of smoking related parameters at monthly intervals. The STS involves monthly cross-sectional household computer-assisted interviews, conducted by the British Market Research Bureau as part of their monthly omnibus survey, of approximately 1,800 adults aged 16 and over in England (Fidler et al., 2011). Survey participants are drawn from aggregated output areas (containing 300 households). These areas are stratified by ACORN (A Classification of Residential Neighbourhoods) characteristics (an established geo-demographic analysis of the population (<http://www.caci.co.uk/acorn/acornmap.asp>) and the geographic neighbourhood is then randomly selected to be included in an interviewer's list) and region. ACORN is a geo-demographic information system categorising all UK postcodes into various types based upon census data and other information such as lifestyle surveys. This approach to profiling ensures an appropriate mix of areas by socio-economic group. Individuals' houses are approached at various times (during mid-afternoon and late evening) to maximize participation. One person per household over the age of 16 is interviewed using computer-assisted questionnaires until quotas based on the 2001 census (i.e. age, sex, social grade, region, working status and presence of children in the population) were fulfilled. Between November 2006 and December 2010 a total of 90,568 participants completed the baseline survey (monthly range = 1,634-2,642) (Fidler et al., 2011).

4.3.2 Measures

The key assessments for each participant at each household survey include questions on the following: smoking status, serious quit attempts in the last 12 months, amount smoked (cigarettes or other tobacco products per day, week or month), current or past nicotine dependence (Fagerstrom test for Nicotine Dependence; Heatherton et al., 1991), motivation to smoke, motivation to quit smoking (desires, intentions, and reasons to quit), whether currently trying to cut down but not in an attempt to stop completely, NRT use while smoking (when cutting down; when prohibited from smoking), cost of smoking (average spend on licit and illicit tobacco), sources of tobacco purchase, and demographic characteristics (gender; age; socio-economic group; marital status; employment status; geographic region).

In each STS survey there is the capacity to add questions on specifics when funding permits. Such additional questions include: source of tobacco purchase; price paid for illicit tobacco; views on banning tobacco; support for a nominal duty on tobacco products to fund tobacco control; perception of national smoking prevalence; factors surrounding the introduction of England's smokefree policy. Additionally, questions are frequently adapted in light of discussions regarding the need to assess different aspects of a certain parameter.

4.3.3 Summary of the strengths and limitations of the STS

The STS is a novel research program which provides ongoing, nationally representative data on key indicators of smoking behavior, cessation, and tobacco control initiatives. The main strengths of the STS include a large nationally representative sample, stratified random sampling to ensure that members of each socio-economic group are represented in the overall sample, careful wording of

questions to maximize the number of individuals who respond and the option of adding new questions in response to new policies, campaigns, events, and shifts in smoking trends (Fidler et al., 2011). However, there are certain limitations that the STS suffers from in regards to investigating illicit tobacco use. First, the STS may not fully reflect true prevalence of illicit tobacco use and those who engage in this activity may be reluctant to participate in such surveys or answer truthfully to questions about illegal behaviour. Secondly, unlike observational methods that include examining tobacco product packs and the comparison of tax paid sales and individually reported consumption measures, use of self-report is subject to recall bias and so likely result in an over or underestimation of illicit tobacco use. However, the STS is robust and reliable, and the only national survey to ask questions on source of tobacco and cigarette purchase. Lastly, the STS does not collect data on ethnicity, a factor which could possibly have revealed an association to illicit tobacco use. Nonetheless, the STS provides up to date data, allowing for month to month analysis of illicit tobacco purchase. Therefore, this data set adequately allowed for the assessment of illicit tobacco use and price paid for illicit tobacco products in England.

Key findings from the STS are published on a dedicated website: <http://www.smokinginengland.info>.

4.4 Qualitative method: Interviews

Qualitative research can be useful in understanding complex social processes and capturing essential aspects of a phenomenon from the perspective of the participants (Curry et al., 2009). When analysing complex issues such as the report of an illegal activity, in this case illicit tobacco purchase, a qualitative methodology can be useful

in exploring the beliefs, values and motivations that underlie this purchasing behavior (Berkwits and Inui, 1998; Crabtree and Miller, 1999).

4.4.1 Semi-structured interviews

Semi structured interviews are the most commonly used interview type in qualitative research (Kitchin and Tate, 2000). A semi-structured rather than structured interview approach to qualitative data collection was employed because it offered sufficient flexibility to approach different participants differently while still covering the same areas of illicit tobacco use. In semi-structured interviews although the interviewer prepares a list of predetermined questions (interview schedule or guide), the interview unfolds in a conversational manner offering participants the chance to explore issues they feel are important (Longhurst, 2010). Furthermore, semi-structured interviews can help structure data collection while keeping the focus sufficiently broad to allow for hidden or emerging themes (Varvasovszky and Brugha, 2000). This approach to qualitative data collection was favoured over other formats such as focus groups because this research was interested in investigating the individuals' personal beliefs and experiences of illicit tobacco trade and not on gathering information on collective views. In addition, a group interview may not have been suited to gathering information on illicit tobacco use as some individuals may have been reluctant to discuss this in a group. In addition, certain individuals may not be confident communicators or very articulate in a group setting, causing others to dominate the discussions, thus making the findings biased. Furthermore, the method of focus group discussions may discourage some people from trusting others with sensitive or personal information and in the studies it was important that each participant's views were expressed and heard. Finally, focus groups are not fully confidential or anonymous, because the material is shared with the others in the group.

4.4.2 Framework approach to interview data analysis

Framework analysis was developed by social policy researchers in the context of conducting applied qualitative research as a pragmatic approach for real-world investigations (Ritchie and Spencer, 1994; Ritchie and Lewis, 2003). It is considered a straightforward approach which provides transparent results and offers conclusions that can be related back to original data (Johnston et al. 2011). Framework analysis is widely used in applied policy research (Ritchie and Lewis, 2003) and in healthcare research settings such as midwifery (Furber, 2010), nursing (Swallow et al., 2011), and health psychology (Tierney et al., 2011).

Framework analysis was adopted for this research because it is aptly suited for answering specific questions, a limited time frame, pre-designed sample (e.g. current smokers reporting purchasing cheap tobacco) and a priori issues that need to be addressed (Ritchie and Spencer, 1994; Srivastava and Thomson, 2009). It consists of a systematic, matrix based approach to qualitative data analysis which classifies and organises data according to key themes, concepts and emergent categories (Ritchie et al., 2003). Framework analysis allows themes to develop from the research questions as well as from the narratives of research participants and so provides a rich set of data. To achieve this, data is put through five stages of analysis, outlined below:

1. **Familiarization:** this is the first stage in framework analysis and allows the researcher to become familiar with the range and diversity of the data collected. Primarily, familiarisation involves an immersion in the data which results in the researcher gaining an overview of the richness and depth of the data. This can be achieved by listening to the interview tapes, reading the transcripts in their entirety several times and studying any observational or summary notes taken during and

immediately after the interview. During the process of familiarisation the researcher lists key ideas and any major themes that begin to emerge.

2. **Identifying a Thematic Framework:** this involves identifying a thematic framework, by identifying the key issues, concepts and themes by which the overall data can be examined and referenced. This usually draws upon the a priori themes (which would have been introduced through the interview schedule), emergent themes raised by the interviewees and analytical themes arising from the recurrence of certain views or experiences. This is an important stage in the data analysis process as it involves both logical and intuitive thinking about the relevance and importance of issues and connections between ideas.
3. **Indexing:** The third stage, indexing, comprises of sifting and sorting the data and making comparisons both within and between cases. Indexes provide a process for labelling the data and breaking it down to manageable bits for later retrieval and exploration. A priori and emergent themes are sorted and grouped and placed within an overall framework with numbers assigned to differentiate the individual categories.
4. **Charting:** This stage in the analysis process refers to the summarising of the key points of each piece of data but still retaining its context and original language and placing it in the thematic matrix. It involves lifting the quotes from their original context and re-arranging them under the newly-developed appropriate thematic content. One of the most important aspects of charting is managing and reducing the data by comparing and contrasting data and cutting and pasting similar quotes together.
5. **Mapping and Interpretation:** This final stage involves the mapping of the thematic framework onto all the interviews conducted. This provides an overall picture of the information gathered and allows the researcher interpret all the themes and sub-themes from the interviews.

The strengths of the framework approach to qualitative data analysis is that it is systematic as it allows for methodical treatment of the data; it is comprehensive (allowing a full rather than partial or selective review of the data collected), it allows for within-case and between-case comparisons and it allows for easy access and retrieval of the original material (Srivastava and Thomson, 2009).

4.4.3 Summary of the strengths and limitations of semi-structured interviews

The strengths of semi-structured interviews are that they produce in depth information; interviewees can influence the discussion so unexpected issues can emerge and the researcher is able to probe to better understand the interviewee's perspectives and experiences. Additionally, due to the flexible nature of semi-structured interviews and the order of questions not fixed, flow and sharing of views are more natural. Unlike other qualitative designs such as focus groups, individual semi-structured interviews allow interviewees to present their personal experiences. This works best for the nature of the investigation into the views of stakeholders in a multi-agency partnership programme aimed at tackling illicit tobacco trade and smokers' personal beliefs, experiences and views on illicit tobacco.

There are some difficulties in using semi-structured qualitative interviews as there is some concern about possible lack of trust, as the interviewer may be previously unknown to the interviewee and thus choose not to divulge information that he or she considers to be "sensitive" (Myers and Newman, 2007). This was the case in this research and is particularly relevant when asking interviewees to discuss their involvement in a potentially criminal activity. This was overcome by developing a rapport with the interviewees to put them at ease, as well as guaranteeing them that all discussions during the interview were confidential and would be anonymised.

Due to the criminal nature of illicit tobacco trade, interviewees who were wary of discussing this issue were assured that it was purely an academic exercise and that no law enforcement agencies were involved.

Some questions asked in interviews could be seen as ambiguous and thus not always clear to interviewees (Fontana and Frey, 2000). In the current research interviewees were able to ask that questions be elaborated on if unclear to them and this was done. Another limitation of semi-structured interview studies is that they are time consuming to analyse and analysis is difficult and has to be done by the interviewer and by another qualified researcher for accurate results. Finally, findings from qualitative research are difficult to generalise due to the small sample size. Nonetheless, it is a powerful data gathering technique and allows for an in-depth exploration and understanding of participants beliefs and views on the subject matter.

To conclude, directly asking smokers about their tobacco and cigarette purchasing behaviour is perhaps the simplest and most direct approach to obtaining estimates of illicit tobacco trade (Merriman et al., 2002). This method of data collection has the potential to increase knowledge and understanding of the illicit tobacco market. A mixed method approach combining both qualitative and quantitative methods can potentially make available a more complete picture and understanding of the illicit tobacco trade, which other methods such as the observation of discarded packs and use of tax paid sales cannot solely provide.

CHAPTER 5

VIEWS OF KEY STAKEHOLDERS IN A MULTI - AGENCY PROGRAMME TACKLING ILLICIT TOBACCO TRADE IN THE NORTH OF ENGLAND: AN INTERVIEW STUDY

5.1 Introduction

Tackling the illicit tobacco trade effectively not only requires international collaboration but also joined up national working across multi-agencies (Her Majesty's Revenue and Customs (HMRC), 2008). That is, reducing the availability and use of illicit tobacco cannot be effectively undertaken by any individual agency working alone. Indeed UK health policy systematically identifies partnership working as cardinal to tackling complex, multi-faceted causes of health inequalities (Department of Health (DH), 2000; 2001a; 2003; 2004; 2006, cited by Jackson et al. (2009)). Moreover, national and local policies increasingly call for enhanced and more effective partnership working as a solution to complex health issues (Glasby and Dickinson, 2008). In public health, partnerships aim to improve conditions and outcomes related to the health and well-being of the population (Himmelman, 1992). It is believed that multi-disciplinary and multi-agency working is needed to guarantee the health of the public (Gilmore, 2001) and with most new funding and policy initiatives, there is usually a prerequisite that local agencies work in partnership to bid for resources (Glasby and Dickinson, 2008). In Public Health, partnerships take many forms and their structure can vary and may include formal organisations with a financial stake or interest, or grassroots organisations that form around a recent event or a local concern (Roussos and Fawcett, 2000). Similarly, the vision and mission of the partnership may focus on a number of outcomes.

5.2 Defining partnership

There are various definitions of ‘partnership’ in existing literature, and these represent different views of what a partnership should be, should comprise of and should achieve. According to Sullivan and Skelcher (2002) the key features of partnerships:

- a. Involve negotiation between people from different agencies committed to working together over more than the short term;
- b. Aim to secure the delivery of benefits or added value that could not have been provided by any single agency acting alone or through the employment of others (that is, shared goals); and
- c. Include a formal articulation of a purpose and a plan to bind partners together.

In contrast, The Audit Commission (2002), offer the following definition of partnership:

- a. Services organised around the needs of the service user;
- b. Services recognising that they are interdependent and that action in one part of the system will have a ‘knock-on effect’ somewhere else;
- c. Agencies developing shared vision, objectives, action, resources and risks;
- d. Users experiencing services as seamless.

Partnership working has also been defined as “the involvement of at least two agents or agencies with at least some sort of common interests or interdependencies; and would probably also require a relationship between them that involves a degree of trust, equality or reciprocity” (Glendinning et al., 2002). Tuckman (1965) outlined various stages in the development of a partnership. At the early stage of partnership forming according to the Tuckman model (1965) there is the need for stakeholders to

establish tentative relationships and networks amongst individuals and make a determination of whether or how much to commit to the partnership. This rolls on to the next stage of storming when tension and conflict begin to form as factions arise and start to take hold and issues of control and competition threaten the partnership (Tuckman, 1965).

5.3 Requirements for a successful partnership

Although partnerships can be inherently advantageous, many partnerships struggle to make the most of the collaborative process and become successful (Weiss et al, 2002). There is limited evidence on what makes partnership working effective, as the results of partnership working may take several years to observe and are, because of the complex nature of the issues being addressed, often difficult to evaluate. Moreover, partnerships face numerous obstacles usually resulting from the inherent difficulties of getting agencies with distinctly separate purposes, structures and ways of doing things to work together (Audit Commission, 1998). Other obstacles highlighted included: keeping partners involved, getting partners to agree on priorities, monitoring the partnership's effectiveness, and deciding who will provide the resources needed to achieve the partnership's objectives (Audit Commission, 1998). The Audit Commission report goes on to outline what is needed to make a partnership successful such as: maintaining partners' commitment and involvement in getting things done, building trust between partners, linking the partnerships work to partners' mainstream activities and focusing on outcomes (Audit Commission, 1998).

Tackling the illicit tobacco trade is a complex feat that requires joint action at national (e.g. joint enforcement work between HMRC and UKBA), regional and local levels; nonetheless, the difficulty in doing so needs to be acknowledged.

Although HMRC and UKBA have seen some success in their collaboration (Department and Health (DH), 2010), the partnerships in the North of England Programme are more complex (involving agencies with very different cultures and priorities) and will need to work successfully together in order to achieve the Programme's goals.

5.4 The North of England 'Tackling Illicit Tobacco for Better Health' Programme

The North of England tackling Illicit Tobacco for Better Health Programme (hereafter referred to simply as the Programme) is a world-first project which, through the collaboration and joint working of various agencies, hopes to improve the health of the population by reducing smoking prevalence through a reduction in the availability (supply) and demand for illicit tobacco. The Programme was initiated in 2007; followed by a National Think Tank meeting on tackling cheap and illicit tobacco in April 2008. A business case was submitted in November 2008 to access funding from the DH. Implementation of the Programme commenced in 2009 with a Work Planning meeting taking place in January 2009 and a Programme stakeholders meeting in February 2009. The Programme brought together the regional offices for tobacco control in the North West and North East (Smokefree North West and Fresh Smokefree North East) and Smokefree Yorkshire and the Humber, to form a partnership across the North of England region with key intelligence and enforcement agencies (Trading Standards (TS) and their Scambuster teams, HMRC and the UK Border Agency (UKBA), Police forces, the Serious and Organised Crime Agency and the Association of Chief Police Officers (ACPO)). The Programme proposed to achieve its aim through the implementation of various activities which form the eight key objectives of the Programme:

1. Developing partnerships

2. Engaging health care and community workers
3. Generating and sharing intelligence
4. Identifying informal markets and planning preventive action
5. Delivering enforcements
6. Marketing and communications
7. Working with businesses
8. Assessing progress

The UK Centre for Tobacco Control Studies (UKCTCS) was commissioned by the Programme to conduct its evaluation. This study formed part of the evaluation and also allowed for an understanding of policy responses to the illicit tobacco trade. This study adds a valuable piece of information to illicit tobacco literature as it highlights significant work being undertaken to tackle illicit tobacco in the North of England and explores the dynamics of a world-first multi-agency partnership to tackle illicit tobacco and the difficulties faced in doing so.

5.5 Study aims

The evaluation of the Programme took a Theory of Change approach, defined as a ‘systematic and cumulative study of the links between activities, outcomes and contexts of an initiative’ (Connell and Kubisch, 1998). Theory of Change places great importance in stakeholders’ assumptions; therefore in-depth, semi-structured interviews of key stakeholders in the Programme were carried out to get an overview of their expectations and understanding of the Programme. Specifically, the objectives of this study were to determine:

1. Stakeholders’ prior involvement with, and amount of time currently spent on, illicit tobacco

2. Expected impact, and anticipated problems, of the Programme at the beginning of stakeholder involvement
3. The reasons for stakeholders becoming involved and expectations of the Programme
4. Current knowledge of the Programme and its objectives and the role stakeholders play within it
5. Stakeholders views on progress to date and how they think the Programme should develop

5.6 Methods

The stakeholder interviews took place between November 17th and December 4th 2009.

5.6.1 Participants

It was recognised that the Programme had a large and varied number of stakeholders, but that members of the Programme Governance Board (16 stakeholders) were considered to be key and were therefore the focus of this evaluation. A list of members of the Programme Governance Board was obtained from the North East Regional Tobacco Policy Manager (RTPM) (Table 7.1).

Table 5.1: Details of key stakeholders and codes assigned to obtain anonymity

Stakeholders	Assigned code
Her Majesty's Revenue and Customs Representative	National Enforcement Agency1
Her Majesty's Revenue and Customs Representative	National Enforcement Agency2
Her Majesty's Revenue and Customs Representative	National Enforcement Agency 3
Her Majesty's Revenue and Customs Representative	National Enforcement Agency 4
Regional Tobacco Policy Manager	Health1

Regional Tobacco Policy Manager	Health2
Regional Tobacco Policy Manager	Health3
Trading Standards Lead	Local Enforcement Agency1
Trading Standards Lead	Local Enforcement Agency2
Trading Standards Lead	Local Enforcement Agency3
Trading Standards Lead	Local Enforcement Agency4
Trading Standards Lead	Local Enforcement Agency5
Interim North of England Programme Manager	IPM
Marketing and Communication Consultant	MCC1
Marketing and Communication Consultant	MCC2
Marketing and Communication Consultant	MCC3

Members of the Programme’s Governance Board (hereafter collectively referred to as ‘key stakeholders’) were informed by the Programme evaluation team of the need to interview them. Emails were sent to all key stakeholders to set dates for the interviews and these were followed up by telephone contact if no reply to the email was received. Between three and five days before the interview date, a reminder email was sent to confirm dates and times of interviews. Four interviews were carried out by Professor Ann McNeill (heading up the programme evaluation for the UKCTCS and second supervisor for this PhD) and the remainder by the author of this thesis. Eleven interviews were conducted face-to-face at the workplaces of the stakeholders, four were conducted before and after a steering group meeting at another venue; one of the interviews was conducted over the telephone.

5.6.2 Procedure

Semi-structured interviews were considered to be the best means of getting a rich narrative of the key stakeholders’ understanding of the Programme and the factors they see as important to the Programme’s success. Open-ended questions were asked, with the aim of exploring the views, opinions and concerns of the key stakeholders. These were followed by probe questions to get an in-depth understanding of a particular subject matter (Ritchie and Lewis, 2005). Semi-structured interviews such as these enable interviewees to talk about a particular area

in detail and depth, allowing for more complex issues to be discussed and clarified as the interviewer is able to probe areas suggested by the respondent's answers and to pick up on information that the interviewer had no prior knowledge of (Britten et al., 1995).

All interviews were recorded using a standard digital audio recording device. On average the interviews were 45 minutes long (range: 30-74 minutes). In some instances the interview had to be prematurely curtailed because the interviewee had other engagements. In one case the audio recorder stopped working half way through the interview and so the interview was carried out again on the phone from where the recording of the previous interview stopped.

5.6.3 Interview topic guide

The interview schedule (Appendix 6.1) was decided upon with the input of an expert panel of academics from the UKCTCS who also contributed to the write-up of this study. Their opinions were sought on the focus and length of the interview schedule and the wording and layout of questions. The interview schedule focused on key stakeholders' perceptions of the programme at early involvement in the programme, their knowledge and understanding of the programme, their roles within the programme, and thoughts on the programme's progress and finally stakeholders' views on the future of the programme. One of the key stakeholders was leaving the Programme prior to the development of the interview schedule and so had to be interviewed without one. However, this unplanned interview covered most of the key areas to be explored. This interview was not recorded; instead the interviewer (McNeill) made notes of the discussions. Other interviews did not always follow the set order of questions as shown in the interview schedule, nor were the wording of questions the same for all interviewees. Some additional questions that occurred to

the interviewer during the interview were asked and, if a topic was raised that was previously unknown, this was explored further.

5.6.4 Data analysis

All interviews were transcribed and analysed using 'Framework Analysis' (Ritchie and Spencer, 1994) by the author, without any assistance of qualitative analysis software. First, the transcripts were examined to determine important core themes based on a priori issues and emergent themes. These themes were then applied to further transcripts in order to refine them and to pull together the key characteristics of the data set as a whole. This was done by lifting data from their original context and arranging them under the appropriate thematic reference (Indexing and Charting). The various themes and issues observed from the interview data were then mapped and interpreted according to issues raised by the interview schedule (a priori issues) and those discovered from the interview process. This provided an overall picture of the information gathered from the interviews. Analysis of the data was primarily conducted by the author of this thesis and then second coded by another researcher to enhance validity. The author of this thesis also went through the coding of transcripts a second time in order to improve reliability. To maintain anonymity, each participant was assigned a code according to the category of their organisation. Quotes are placed where relevant in this thesis.

5.7 Findings

The analysis revealed five super-ordinate themes, partially influenced by the content of the interview schedule, around which the perspectives of stakeholders were arranged: general views on the Programme, partnership working, intelligence generating and sharing; resourcing the Programme, the Programme's evaluation and concerns about the Programme. Each super-ordinate theme served as an umbrella for

20 sub-themes and each sub-theme is elaborated further and clear illustrations from the transcripts are presented.

5.7.1 General views on the Programme

Stakeholders were asked general questions about their thoughts and concerns about the Programme, the Programme objectives and any perceived barriers to achieving these. In addition, questions were asked regarding stakeholders feelings about the programme aims, progress and the overall management of the Programme. Figure 5.1 outlines the 20 sub-themes that emerged from the interviews. These were arranged over five super-ordinate themes.

5.7.1.1 Initial thoughts on the Programme

Stakeholders' initial thoughts appeared to be divided into two distinct groups (although both views were not mutually exclusive): that the Programme was exciting and/or challenging. Illicit tobacco was viewed as a complex issue which needed to be attended to and the Programme as an excellent opportunity to do this. This was an important and new development as research carried out a few years ago in the North East of England had previously shown that this wasn't a priority (Heckler and Russell, 2008).

'Well, my early thoughts about doing something around illicit tobacco was, it's about time, we need to tackle this issue' (Health1)

There was also excitement expressed about what multi-agency work could achieve and what it could offer participating agencies and stakeholders.

'Closer working was the big thing for me, I wanted to see how as agencies we could share intelligence and see if we could benefit each

other, that was what I was hoping I would get out of it really' (National Enforcement Agency1)

Stakeholders also reported that their initial thoughts about the Programme included concerns over the complexity of the issue and how challenging this made it.

'My initial thoughts were that this was a very complex issue and that it was a multi-agency and a multi-discipline approach that will be required to resolve it. So a very complex problem that needed relatively complex solutions which were driven by research and intelligence so that we are all heading in the right direction' (Local Enforcement Agency5)

There was evidence from stakeholders of far from complete engagement to the Programme's objectives at the outset (although later comments illustrated that subsequently (i.e. as the Programme progressed) and they became aware of illicit tobacco undermining the effect of an important policy lever (high tobacco price), they did support the Programme in its entirety.

'Very much on a personal level I used to have the view that why are trading standards investing scarce resources in protecting the brands of tobacco when the genuine products actually kill people. That was my personal thought on the issue. It wasn't something that particularly got me excited' (Local Enforcement Agency1)

5.7.1.2 Rationale for the Programme

The reasons for the development of the North of England illicit tobacco Programme were cited as: the need to reduce smoking prevalence overall, the high prevalence of illicit tobacco use amongst smokers in the region, illicit tobacco being an international problem, a lack of information on illicit tobacco at the time and the

need for a partnership in order to tackle illicit tobacco. Other reasons given were: that no one in the health aspect was taking responsibility for illicit tobacco. It was also not a priority and this needed to be addressed. Furthermore, previous attempts at developing a partnership to tackle illicit tobacco had been unsuccessful.

‘So actually there has been some collaborative work done then but it was collaborative without any joined up enforcement, without any infrastructure behind it. In hindsight when I look back on it, it was actually quite naïve really’ (Health2)

Figure 5.2: Thematic framework

<p>1. GENERAL VIEWS ON THE PROGRAMME</p> <p>1.1 Initial thoughts on the Programme</p> <p>1.2 Rationale for the Programme</p> <p>1.3 Aims of the Programme and its potential benefits</p> <p>1.4 Relevance of the Programme’s objectives to stakeholders</p> <p>1.5 Thoughts on the overall management of the Programme</p> <p>1.6 Thoughts on the progress of the Programme</p> <p>1.7 The Programme’s achievements thus far</p> <p>1.8 Learning from the Programme</p>	<p>4. THE PROGRAMME’S RESOURCES</p> <p>4.1 Resources for individual agencies in the Programme</p> <p>4.2 Limited resources a challenge to the Programme</p> <p>4.3 Beliefs on why illicit tobacco is cheap</p> <p>4.4 Negative views on tobacco taxation</p>
<p>2. PARTNERSHIP WORKING</p> <p>2.1 Effectiveness of the Programme’s partnership</p> <p>2.2 Areas of difficulty in partnership working</p> <p>2.3 Difficulty engaging other key stakeholders</p> <p>3. INTELLIGENCE GENERATING AND SHARING</p> <p>3.1 Difficulties with intelligence sharing</p> <p>3.2 Secure systems needed for intelligence sharing</p> <p>3.3 Issues with the telephone reporting line</p>	<p>5. THE PROGRAMME’S EVALUATION</p> <p>5.1 Measurement of Success</p> <p>5.2 Key Performance Indicators</p>

5.7.1.3 *Aims of the Programme and its potential benefits*

Unsurprisingly, many stakeholders stated the Programme's aim as reducing smoking prevalence by causing a reduction in supply and demand of illicit tobacco, in line with the specified aim of the Programme; however a few stakeholders geared this towards young people and disadvantaged communities. This is significant as it highlights the lack of clarity amongst stakeholders about what the Programme is aiming to achieve and where their focus should lie.

Many stakeholders when asked to state the Programme's aim mentioned both a reduction in supply and demand of illicit tobacco, a few referred solely to supply, although it's possible that this was in the context of ongoing complex discussions at the time of the interviews, on intelligence sharing in relation to sources of supply (an issue discussed further below), which may therefore have been more top of mind. This suggests a lack of consensus as to where the efforts of the Programme should be focused whether supply, demand or both and an absence of good communication within the members of the governance board.

'Well the Programme aim is to reduce the supply of illicit tobacco so thus reducing tobacco prevalence and tobacco consumption' (MCC1)

Other Programme aims mentioned were: making illicit tobacco a priority (in key organisations) and increasing awareness of illicit tobacco in the community. In addition to increasing awareness of illicit other stakeholders thought the Programme's aim to be to make illicit tobacco less of a social norm and less acceptable in the community. One stakeholder had a slightly different perspective in suggesting that the key goal was to switch consumers' use of illicit tobacco to licit tobacco so that other tobacco control policies such as increasing price could then have maximum effectiveness. This in all likelihood might be the main thrust of the

programme, however only one stakeholder mentioned this when asked about the aim of the programme. This suggests that although stakeholders are engaged with the written statement of the programme's aim each has their own personal understanding of what the programme wants to achieve. There was also mention of the need for one of the aims of the Programme to be long term sustainability through the laying down now of an infrastructure that could see through the next decade.

Developing partnerships in terms of enforcement was stated as the aim of the Programme by one stakeholder and again here the predominance of supply as a focus is noticeable.

'And I think it's to build up an effective system whereby the 3 key agencies Police, trading standards and HMRC in terms of enforcement can be much more efficient and effective in how they share, analyse intelligence and how they then do their enforcement activity' (Health2)

One stakeholder stated the aim of the Programme as developing a mainstream approach within local authorities in the tackling of illicit tobacco. Stakeholders also highlighted some potential benefits of the Programme which included: changing perceptions and priorities within agencies, keeping tobacco on the agenda, increasing research in illicit tobacco, test of a marketing campaign and control of how law enforcements works.

5.7.1.4 *Relevance of the Programme's objectives to stakeholders*

The widespread acknowledgment of the importance of the Programme was accompanied by an expressed view that all of the Programme's objectives were relevant to all of the partner organisations to some degree. However, there was also evidence that some partner organisations had a particular focus which made some of

the objectives more relevant to them than others. Moreover, as comments elsewhere in this report indicate, and reflecting the discussion above about the balance between supply and demand measures, there was some vagueness about what the key priorities of the Programme should be. Therefore, although stakeholders were engaged to the aims of the Programme, a few were unaware of their individual objectives and were only engaged to the objectives specific to their agency's roles. The objective of working with businesses seemed low on the Programme agenda.

“If there is any one area that is perhaps less of a priority at the moment it could be said to be the working with business one, because that is almost like a sub priority” (Local Enforcement Agency5)

There were **a few** stakeholders who found it difficult to remember the Programme's key objectives.

5.7.1.5 Thoughts on the overall management of the Programme

Stakeholders were asked to comment on the overall management of the Programme. Most felt the Programme was professional and managed excellently. Stakeholders attributed the good management of the Programme to the RTPMs' dedication and commitment, in terms of personal input and driving the Programme along.

“I think without their (RTPMs) personal input into this we wouldn't be as advanced as we currently are” (National Enforcement Agency3)

Stakeholders felt the Programme management became successful after the Programme Governance Board was properly set up. At the time of the interviews, the Interim Programme Manager (IPM) had just left and a new one yet to be appointed. A few stakeholders highlighted the importance of a Programme manager and the need to appoint one to oversee the Programme and be a single point of

contact. The lack of an IPM might also have contributed to the view by a minority of stakeholders at the time of the interviews that the Programme was demanding on their time.

‘I think probably that I hoped that by this stage I would be able to step back a little bit more and be less involved in day to day. Not that I will step back completely, but just it wouldn’t be taking up so much of my time’ (Health3)

Another solution to the demands of Programme management might lie in improving administrative support, a weakness highlighted by one of the stakeholders. There was recognition that engaging stakeholders on the ground (at an operational level) was an important need in terms of managing the Programme’s work.

5.7.1.6 *Thoughts on the progress of the Programme*

Stakeholders felt the Programme was progressing well and on track, with a few commenting on the progress already made.

‘I think it’s going really well, as I said it’s now a number one priority on trading standards agenda. On the enforcement side there is now more than enough work at the moment so now we are having to prioritize’ (Local Enforcement Agency2)

Stakeholders expressed the belief that the Programme was now at a critical implementation stage. A few stakeholders, however, perceived that the Programme was not progressing well due to various reasons, but a key stumbling block appeared to be in relation to intelligence sharing (an issue discussed further in the findings) and awaiting the Department of Health’s national marketing and communications strategy.

‘[...] and the issues of intelligence sharing, the progress has been painfully slow and there’s still work to do with that. I think it’s too early to say whether the Programme is on track to be honest’ (Local Enforcement Agency1)

This implies that stakeholders had differing expectations of success or progress and slightly different views and emphasis on aspects of the Programme with a majority focusing on supply and a few on demand. The Programme had tried to overcome these differences between agencies in the planning of the Programme through the identification of common ground and shared goals; however differences of perception still emerged. Furthermore, each region appeared to be at different levels of Programme development which suggests that maybe the Programme was too ambitious to think it could be implemented across three regions.

5.7.1.7 The Programme’s achievements thus far

Stakeholders believed that the Programme had achieved some of its objectives at the time of the interviews. In particular, stakeholders believed that the profile of illicit tobacco had been raised amongst key stakeholders and was now a priority in some organisations. As mentioned above, this is an important finding and demonstrates an early success of the Programme. Stakeholders also believed that the Programme had resulted in an increased awareness of illicit tobacco. Despite the perceived difficulties in partnership working, many stakeholders believed that significant strides forward had been made in this respect. Joint enforcement work was specifically pointed out as a tangible result of developing these partnerships.

‘It has enabled quite a lot of joint working to take place in terms of enforcement activities, now that’s really good’ (Local Enforcement Agency3)

One stakeholder stated that the Programme had achieved the development of an information sharing protocol between the two agencies responsible for carrying out enforcement activities. Another achievement mentioned was the fact that the Programme had given a real direction on how to tackle illicit tobacco, which prior to the Programme's initiation was nonexistent.

'Before illicit tobacco wasn't really thought – well it was key within people's tobacco control strategies but nobody knew how to deliver on it. So this is given us a real chance and guidance on how we can deliver on that aspect around reducing tobacco consumption by reducing the supply of illicit tobacco which undermines all the pricing that we push forward with tobacco products' (MCC1)

Getting resources into the enforcement agencies was mentioned as another achievement of the Programme.

5.7.1.8 *Learning from the Programme*

Stakeholders were asked to discuss any lessons learnt from their involvement in the Programme. Not surprisingly, stakeholders indicated that their knowledge on illicit tobacco and the issues surrounding it had increased since being involved in the Programme. Again, aspects of partnership working, in terms of increased awareness and knowledge of other agencies and how they operate, were highlighted as learning points. Stakeholders also mentioned other learning around partnership working in terms of its benefits and how to work together when the organisations involved have different cultures and goals to achieve. One stakeholder mentioned learning about how good organisation and management of a Programme can impact on a very complex issue.

‘I think what I have learnt is that through good organisation and managing the process in the way this process has been managed that we can start to impact on an issue that is very complex. And so the way this has been managed has been a good learning point for me’ (Local Enforcement Agency5)

Other learning was around the complexity of the Programme, about engaging central, regional and local governments and insight into the Programme’s target audience.

5.7.2 Partnership working

One of the main themes of discussion was partnership working and some of the findings relating to this have already been discussed. From the outset, partnership working was identified as one of the key objectives through which the work of the Programme would be delivered, but it was also raised as a potential barrier should partners fail to work together effectively. Although key improvements were perceived to have been made in how partners were working together and there was a much greater understanding of the other agencies making up the partnerships, there were ongoing concerns about the different priorities and approaches within the agencies. These issues are explored further below.

5.7.2.1 Effectiveness of the Programme’s partnership

When asked directly whether they believed the multi-agency partnerships were working, stakeholders’ views were mixed. A few stakeholders stated that the multi-agency partnership was working well, but for others, this was only at the operational level. Partnerships appeared to be built on existing personal relationships and stakeholders voiced concerns about the sustainability of these in the absence of more

formal structures.

‘But in order for me to be able to say the partnerships are working well that needs to be happening in a fully officially sanctioned way, not just in an ad hoc way. It needs to be systematised, it needs to be routine and whoever steps in those shoes, it will carry on. Whereas I think it’s relying to some extent on existing relationships at the moment and that will change I’m sure’ (Health3)

Stakeholders expressed that partnerships worked well within the local areas and regions, rather than perhaps across the North of England in general, indicating that maybe the cross-regional approach to the partnership had not been successful. However, one stakeholder did highlight the important fact that the strength of the Programme was as much in the coordination across regions as it was in the coordination between agencies within regions.

5.7.2.2 Areas of difficulty in partnership working

From early on in the Programme, stakeholders had concerns about partnership working in terms of engaging stakeholders and encouraging different agencies with different cultures, ways of working and priorities, to work together. This was also difficult given there were three distinct regions involved, and the fact that at least one agency had a national focus only.

‘Concerns of how we will get everybody committed to it, concerns of how we will get it working across 3 regions, where each region is quite different and may have different priorities and approaches things in different ways’ (Health2)

Stakeholders from the start of the programme were aware of the challenges to be

faced when forming a partnership between very different agencies. Whilst acknowledging the importance of partnership working, the difficulties in doing this were perceived as potential barriers to achieving the Programme's objectives. Different cultures and bureaucracies (including the need to consult within partner organisations before committing to a particular course of action) were perceived as possibly hindering intelligence sharing and prolonging decision making; although it was recognised that these are complex partnerships working on complex issues. There was also some concern about the partnership not necessarily being made up of equal partners.

'And yeah because HMRC, trading standards, health etc have a different perspective sometimes it takes an awfully long time to reconcile or get an agreement or as much content as you can on specific issues because it's a complex partnership and there are complex issues (MCC3)

Lack of trust was cited as a contributory factor but fundamental differences in philosophies and ways of working were also highlighted. Within this recognition of the roles and cultures of different organizations, the national enforcement agency in particular was referred to as an organization with a very different structure and way of working. Stakeholders from this organisation also recognized this but nevertheless, expressed a commitment to making the partnership work.

'Honestly, I've been in law enforcement 30 years, 35 years and you do tend to, what we've done in the past is deal with our own priorities. You do your own thing; you've got your own management silo if you like. We really need to engage and talk to one another, because at the end of the day we are all here for the same objective. Yeah it's got to be the way forward really. A single track approach doesn't work. We couldn't do it on our own; we can't do it on our own' (National Enforcement Agency1)

Avoiding overlap (such as more than one agency responding to the same intelligence) was identified as important in effective partnership working. It was also apparent that the different agencies were striving to identify where their skills and duties were, or could be, complementary.

‘I mean we’ve kind of agreed that our work is to deal very much with the local work because that doesn’t tread on customs toes’. ‘So I think we’ve kind of agreed that trading standards can do that because we’ve got the skills and we won’t be treading on their toes’ (Local Enforcement Agency4)

5.7.2.3 Difficulty engaging other key stakeholders

Another aspect of partnership working was the need to engage other key stakeholders in the Programme and a few stakeholders commented on the difficulties faced in getting some of these key stakeholders on board. Stakeholders believed the Police were not as involved in the Programme as they should be and highlighted the need to engage them in the Programme’s implementation and governance structure. The difficulty in engaging the Police was attributed to the autonomy of individual Police forces and the lack of any appropriate regional structure. There was also the belief that illicit tobacco was not a priority for the Police and whilst unlikely ever to be a priority, there was still the need to engage them in the Programme’s work.

‘I think one of the things that has come out, which is something I knew, but I think it’s probably that perhaps other partners i.e. non trading standards in the Programme probably have too, is the fact that you are never going to get the likes of Police to take illicit tobacco as a main role, but what you can do is say to them there is someone out there who will deal with it if you just tell them where it is’ (Local Enforcement Agency4)

Nonetheless, the Police were viewed as a key stakeholder that needed to be engaged with and there seems to be commitment to achieving this even though it has proved difficult. The absence of such a key agency could mean that the chances of the programme being successful are hampered.

Stakeholders also expressed some difficulty in getting some PCTs and Local Authorities (LAs) to engage in the Programme, and this was very dependent on their engagement with tobacco control in general; although some PCTs were perceived to believe illicit tobacco did not fall within their remit. This is therefore a key role for the local alliances involved in the Programme. The lack of local representation in terms of local alliance partners on the Governance Board may mean that the local voice and concerns are likely to have less weight or not be clearly understood. The sheer number of PCTs and LAs within regions was also identified as a problem, and the personal interest and commitment of individuals in these organisations were often felt to be the key factor as to whether they became involved or not.

‘The biggest challenge is getting the chief execs of the PCTs to commit to this initiative because they do not see illicit tobacco as a remit of health, they say it is just a local authority problem’ (Health1)

Although most references to partnership working alluded to the relationship between individual agencies and how they worked together, most also engaged with other existing partnerships; most notably the tobacco control alliances, which were seen as important allies and partners in the Programme. One stakeholder however, stated that their organisation did not have the resources to be represented at the tobacco control alliance meetings.

‘I made it clear that we could not possibly resource the tobacco

Smokefree alliances. It's completely unmanageable for us to take part in all of the smoking alliances' (National Enforcement Agency³)

5.7.3 Intelligence generating and sharing

Another key theme, related to partnership working, which permeated the interviews was that of intelligence sharing, and this was felt by many to be a stumbling block hindering greater progress being made.

5.7.3.1 Difficulties with intelligence sharing

There were various concerns with regards to intelligence sharing and it being a potential challenge to accomplishing the objectives of the Programme. Stakeholders expressed a willingness to share some intelligence, although the rules and frameworks within individual agencies often precluded the sharing of *all* intelligence. In general, the national enforcement agency was perceived to be unwilling to share intelligence generated by the Programme, a point which was acknowledged by this agency; however there also seemed to be a perception of a lack of willingness at a senior level to resolve the problem.

'We are not going to share all the intelligence, because as with my previous answer we can't. But the low level stuff I have no problem whatsoever' (National Enforcement Agency⁴)

The difficulties with intelligence sharing within the national enforcement agency were reported to be largely historical as previously any information sharing had been done only in a very controlled fashion. There was a recognition that not all intelligence was currently being acted on but new measures had been put in place to deal with this. There were also concerns about the dangers of the same piece of intelligence being acted on by two different agencies in different ways, a problem

alluded to earlier.

‘[...] because actually they get a lot of information about a lot of premises. I can think of at least 2 premises in [...] that we’ve dealt with where someone has come back to us and said I passed this information to customs 3/6 months ago and the bloke is still selling the stuff can you do something about it?’ (Local Enforcement Agency4)

In recognition of some of the difficulties with intelligence sharing and subsequent actions, it was suggested that local issues could be dealt with by the local enforcement agency, and the national enforcement agency can then look further upstream. If implemented this would be useful learning from a failed process in order to achieve the desired outcome.

5.7.3.2 Secure systems needed for intelligence sharing

The sensitivity and security of intelligence being generated was believed to be of paramount importance, particularly by the national enforcement agency. It was therefore perceived that new secure legal mechanisms would be needed to allow intelligence to be shared effectively. Stakeholders alluded to the initiation of an intelligence sharing pilot in the North of England and it was hoped that if successful this would result in future effective information sharing.

‘We are going to initiate a trial in the North, which is all hotline calls going into a national coordination unit and the hotline, they will try to disseminate all the tobacco stuff out. And that will then be routed through to our trading standards opposite numbers and our law enforcement coordinators’ (National Enforcement Agency1)

5.7.3.3 *Issues with the telephone reporting line*

At the time of the interviews, the role of a telephone reporting line was being discussed and this was reflected in the stakeholder interviews. Stakeholders expressed concerns about the appropriateness of this reporting line for capturing intelligence generated by the Programme.

‘One of the primary aims has been driving traffic to the hotline and getting people to report. And I do think that in terms of raising awareness and changing attitudes, that what we need to do is not necessarily about calling the hotline. It might be about speaking out within your community. It might be about changing, obviously people beginning to change their buying behaviour. So I don’t think that reporting to the hotline is necessarily the best measure of success’ (Health3)

There was the notion that the reporting line was not user friendly and so there might be barriers for people reporting illicit tobacco sales. There was also concern amongst stakeholders that intelligence generated via the reporting line may not be fed back to the other agencies involved in the Programme. It would then be hard for partners in the Programme to encourage their colleagues to promote this hotline, if there was no guarantee that the intelligence generated will be shared.

‘If we go down the route of actively publicising this issue and actively seeking information, if that information then goes into the revenue and customs system and then doesn’t find its way to us then we will lose the confidence of the people that are supplying that information. And if we lose their confidence that would have impacts in a number of other ways as well’ (Local Enforcement Agency5)

One stakeholder indicated the need for a contingency plan in case the intelligence

sharing way of working was not successful.

‘The intelligence sharing, that really does need..., I think there needs to be a plan B in operation because as we’ve already mentioned that is going to make or break the Programme. There’s been a huge emphasis on going down one route and trying to make that work which is good and I admire the commitment of those that are doing that. But ultimately if that doesn’t deliver I feel that there needs to be a contingency plan in place to address that’ (Local Enforcement Agency1)

There was the acknowledgement amongst stakeholders that the success of the Programme hinged on intelligence sharing taking place efficaciously.

5.7.4 The Programme’s resources

Another key theme which emerged from the interviews was around the resourcing of the Programme.

5.7.4.1 Resources for individual agencies in the Programme

Stakeholders expressed concerns, and some confusion, about how the funding had been allocated and then apportioned and the outputs emanating from this provision of funding. This was particularly a concern of the national enforcement agency.

‘A lot of funding for example has gone into trading standards. And therefore there are a lot more resources put into things like marketing and putting more bums on seats basically and getting more staff engaged in tobacco whereas me for example again I’ve only got 20 people. There’s been no extra funding for us in terms of what intelligence we put in. More resources would take the squeeze out of everything because at the moment I’m squeezed and it would certainly help me if I had more

resources as always I could direct more time to it, yes' (National Enforcement Agency1)

5.7.4.2 *Limited resources a challenge to the Programme*

When asked to indicate any barriers or challenges to the Programme achieving its objectives, stakeholders cited issues around resources. In particular, there were concerns around insufficient funding being made available to certain aspects of the Programme; for instance dealing with the increased volume of intelligence generated from the telephone reporting line. This was supported by a concern expressed by one stakeholder of the need for more resources to fund more staff if enforcement efforts were successful.

'Some of the barriers could well be that enforcement goes well with this team and they actually say we actually need 2 more people and where are we going to find the money for that' (Health2)

Stakeholders expressed concern about the limited budget of the Programme and whether the Programme's funding could cover its cost, in particular the budget needed to raise the profile of illicit tobacco across the region, and what would happen when funds ran out.

'I suppose my biggest concern is about sustainability and what is going to happen with funding streams for next year' (Health3)

Time was seen as another limited resource. The draws on stakeholders' time, particularly in relation to managing the Programme, were highlighted. Other stakeholders also pointed out that there were not enough dedicated staff and therefore they had needed to put their own personal time into the Programme.

'To be honest I..., the long and tall of it is that I do other work at home

and in my own time which kind of compensates for spending a day at the governance board and things like that’ (Local Enforcement Agency1)

Another key factor raised was ensuring that individual agencies involved in the partnership benefited from the Programme; particularly in the absence of new resources as otherwise it would be difficult to justify their continued involvement. In 2009, the new coalition government announced cuts to the NHS and a disbandment of regional tobacco offices. This undoubtedly would result in further challenges to be faced by the Programme in terms of resources monetary terms and otherwise.

5.7.5 The Programme’s evaluation

Evaluation of the Programme was another theme that emerged in discussions with key stakeholders. The Programme’s evaluation focuses on process measures (identification of projects or sub-projects that worked well and those that did not as part of learning for future development of the programme) as well as long term outcome measures. The issues uncovered from the interviews under evaluation could be divided into two main points; how the success of the Programme would be measured and the key performance indicators (KPIs).

5.7.5.1 Measurement of Success

Issues discussed included how any reduction in smoking prevalence would be measured and could be attributed to the North of England Programme as well as what measures, demand and/or supply, best constitutes success. Despite some of the predominance of comments on supply issues, here stakeholders commented on the importance of reducing demand and smoking behaviour.

‘People tend to focus very much on sort of the quantitative type indicators; you want more intelligence, more seizures, more

prosecutions'. No we don't. We want more people to stop buying illicit tobacco. You cannot continue to invest huge amounts in enforcement activities, that's why your performance indicators cannot all be quantity ones, you have to look for a shift in public behaviour' (National Enforcement Agency³)

Stakeholders reported that other external factors that may affect the Programme's success but were not under the control of the Programme needed to be taken into account. There was also the view that success could also mean diverting resources away from illicit tobacco.

'And one of the obstacles will be, if we are performing very well on tobacco, not as well on alcohol and oils, then they will prioritize alcohol and oils ahead of tobacco' (National Enforcement Agency¹)

5.7.5.2 Key Performance Indicators (KPIs)

At the time of the interviews, the Governance Board had developed draft KPIs which were being discussed with the evaluation team. Stakeholders discussed the difficulties in developing the KPIs.

'I think some of the tricky things we are going to have to bottom out are the KPIs, because we are not all on the same page on that, that's quite clear' (Health²)

There was the mention of delays in developing the KPIs as it was believed that these should have been decided upon at an earlier stage in the Programme. Additionally, there was some concern expressed over the KPIs being focused on outputs rather than outcomes. Evaluation of the extent to which the Programme achieves its aims is rather difficult to determine. A complex issue such as illicit tobacco requires

complex and varying methods to stand a chance of success and these methods can be difficult to measure when evaluating the Programme. In addition, consideration has to be given to other activities taking place at the same time as the implementation of the Programme.

5.8 Discussion

The North of England Illicit Tobacco Programme is the first of its kind aimed at limiting the supply of and demand for illicit tobacco in the region by developing a partnership between health, law enforcement agencies and marketing and communications professionals. These interviews, with key stakeholders were carried out at a relatively early stage in the Programme's implementation. Although we have reported different perspectives of stakeholders which in itself are not outcome measures, it does highlight some process issues that need to be addressed and be learnt from.

Overall, the Programme was seen as exciting and challenging, and as an important vehicle for addressing illicit tobacco. Stakeholders understood the Programme's aims and objectives, although a majority focused more on the supply issues rather than both supply and demand as outlined in the Programme's aim. This might have reflected the stage of development of the Programme at that time, as complex discussions were ongoing around intelligence sharing in relation to sources of supply. The multi-agency partnership behind the Programme was seen as having great potential to tackle the issues raised by illicit tobacco. Some achievements of the programme mentioned by stakeholders included: increased awareness around illicit tobacco trade, joint enforcement work, development of an information sharing protocol and getting resources into some agencies.

Partnership studies indicate that building effective partnerships is time-consuming, resource intensive and very difficult (Wandersman et al., 1997; Cheadle et al., 1997; Fawcett et al., 1997). The success of the Programme hinges on this partnership being successful and unsurprisingly partnership working was a recurring theme in the interviews. Stakeholders acknowledged that significant strides had been made in relation to working with partners, and in particular there was greater understanding of the roles of the different agencies involved in the Programme. The Programme appeared to be progressing well in developing a shared vision and objectives, an understanding of the added value of working in partnership and a commitment to do so. However, concerns were raised about the lack of trust between the different agencies, their different philosophies and ways of working, which could hinder further progress. . Lack of trust could be a barrier to effective partnership and may lead to difficulties in the partnership (Powell et al., 1996; Boddy et al., 1998; Ring and Van De Ven, 1994). Nevertheless, stakeholders expressed a strong commitment to making the partnership work and were striving to identify areas where their skills were complementary to enhance working relationships. There were concerns that partnerships appeared to be built on existing personal relationships and might not be sustainable in the absence of more formal structures. According to stakeholders, there had been difficulty engaging a few stakeholders who were not represented on the Governance Board, such as the police forces. Efforts were currently focused on engaging these agencies as well as involving local partnerships in the Programme.

The nature of illicit tobacco poses particular challenges for this multi-agency partnership due to its connections with organized criminal activities. In order to tackle the supply of illicit tobacco, individuals in the communities need to be aware that the sale of illicit tobacco is illegal and therefore encouraged to report such activity to the local or national law enforcement agencies. However, how do you

develop a user friendly reporting system and how do you appropriately anonymise this information but enable local geographical information to be obtained? Furthermore, how do you share this intelligence with partner organisations securely and in a way that doesn't alert criminals? These were a few of the challenges faced with sharing of intelligence generated by the programme, with most of the concerns expressed by stakeholders being about the unwillingness of the national enforcement agency to share intelligence generated by the programme with other enforcement partners. At the time of the interviews the key mechanism for this was being negotiated and this may have therefore had an undue influence on key stakeholders' views and perhaps also explained why comments focused on controlling supply, rather than demand. Nevertheless, appropriate and efficient intelligence sharing was seen to be essential to the success of the Programme and therefore a fundamental issue needing to be resolved in the immediate future.

Concerns were expressed about limited resources, in terms of money, time and people. In addition, there were concerns with regards to how the Programme was to be evaluated in the future and how any reduction in smoking prevalence could be attributed to the Programme. This is warranted as the difficulty in evaluating a programme aimed at reducing smoking prevalence has been highlighted (Wakefield and Chaloupka, 2000). As the Programme could not be expected to have an impact on smoking prevalence during the evaluation period due to the delays in publication of prevalence data; indicators to assess supply and demand factors needed were the focus of the Programme's evaluation.

There were some limitations in this study. Firstly, like all qualitative studies the findings of this study cannot be generalised. Secondly, stakeholders may have been aware that the interview findings will be presented to the programme committee and

so may have perceived the interviews as a vehicle to verbalize their particular views or agenda. Thirdly, stakeholders may not have been representative of their particular organisation and the views of their colleagues may have differed but this is a common limitation with all qualitative research involving professionals. Lastly, this study only measures stakeholder perspectives on the Programme and not outcomes of the Programme.

5.9 Conclusion

In the tackling of illicit tobacco it is evident that success cannot be achieved by one agency working alone (HMRC, 2008) but rather by the combining of expertise and resources of various agencies and so the partnership to tackle illicit tobacco in the North of England is paving the way and setting an example for other regions to follow suit. Finally, the North of England programme may have a high likelihood of success, seeing significant effects on the illicit tobacco trade if trust between partners is built resulting in shared knowledge and greater community involvement in the Programme's work.

CHAPTER 6

THE USE OF ILLICIT TOBACCO IN ENGLAND: A NATIONAL SURVEY OF ENGLISH SMOKERS IN 2007-8 AND 2010-11

6.1 Introduction

Between 2007-8 and 2011, cigarette smoking prevalence in England decreased from 24.1% to 20.6% (West and Brown, 2011). This decrease was potentially due to the various tobacco control initiatives implemented during the same period of time which were intended to influence smokers' purchasing behaviour. In so doing, these initiatives may have affected the demand (driven by fewer purchases) and supply (driven by fewer sources) of illicit tobacco. These initiatives included the ban on smoking in indoor public places and workplaces, implemented in July 2007 (UK Parliament, 2011). In addition, in 2009 Her Majesty's Revenue and Customs (HMRC) announced the beginning of a partnership with the UK Border Agency (UKBA) to implement a joint strategic approach to tackling the trade in illicit tobacco products (HMRC, 2009). HMRC and UKBA renewed this strategy in April 2011 to include stronger supply chain controls, increased seizures and the tackling demand for illicit tobacco products (HMRC, 2011a).

In the UK, the only routinely collected data on illicit tobacco use are collated by HMRC. During the period of data collection for the current study (2007-8 to 2010-11), HMRC data collection reported a reduction in illicit tobacco use from 21% to 10% of cigarettes and 73% to 46% of 'hand rolled' (RYO) tobacco since 2000 (HMRC, 2011c). These estimates are derived indirectly by using total tobacco consumption (adapted from the national survey self-reported consumption figures) and subtracting legitimate consumption (adapted from returns to HMRC on volume

sold and monies received from tobacco sales); leaving a residual that is assumed to be the illicit market share (HMRC, 2011b). This data is limited in that it does not provide a breakdown of illicit tobacco market share estimates for England. In addition, HMRC estimates are not current as they rely on the General Lifestyle Survey (GLS) which only becomes available a year after the survey period.

This study aimed to address the lack of information on England specifically. The data collection methodology applied takes a different approach and directly asks smokers to state their sources of tobacco or cigarette purchase. This method of surveying English smokers provides more timely estimates as data are collected and available on a monthly basis, rather than yearly.

Illicit tobacco trade is driven by supply and demand, but policies implemented to tackle this trade are mainly focused on reducing the supply of illicit tobacco (see Chapter 3). Based on the data described above, this study aimed to determine whether smokers have multiple sources through which they access cheap tobacco. This will give an indication of how readily available cheap illicit tobacco is in smokers' communities, a contributor to/indicator of the extent of illicit tobacco use.

Although the supply of tobacco is the main focus for policies, it is important to address both drivers of the market in order to combat this illegal market effectively. As the demand for illicit tobacco is also of great significance, this study aimed to determine which smokers are most likely to purchase illicit tobacco. A better understanding of which socio-demographic and smoking factors are associated with reports of illicit tobacco use will not only allow for a better understanding of who is purchasing illicit tobacco products, but can also inform targeted policies and campaigns aimed at deterring illicit tobacco purchase. Several studies have reported

that socio-economic factors such as being male, under age 35, poorly educated, in receipt of low income, from a deprived background and having higher levels of addiction were all significantly associated with illicit tobacco purchase (Lee and Chen, 2006; Lee et al., 2009; Taylor et al., 2005; Tsai et al., 2003; Heydari et al., 2010; Callaghan et al., 2010). It has also been reported that young smokers, particularly the student population, are more likely to smoke smuggled cigarettes (Chen et al., 2010).

In addition to estimating illicit tobacco prevalence and assessing the determining factors for illicit tobacco purchase, this study also measured the proportion of smokers' total tobacco consumption that was illicit. This is of particular interest as it contributes to the accurate estimation of illicit tobacco use. For instance, a survey of smokers in the North of England reported that, although the prevalence of illicit tobacco use declined from 20% to 18% between 2009 and 2011, the proportion of tobacco product purchases which were illicit remained at similar levels (36% in 2009, 35% in 2011) (NEMS, 2011). This indicates that although fewer people reported illicit tobacco purchase in 2011, the proportion of their tobacco consumption that is illicit remained largely unchanged or increased. This suggests that policies may have impacted upon demand (reducing the number of people purchasing illicit tobacco, although not consumption) but not supply (access to illicit tobacco).

Smokers who engage in illicit tobacco purchase may not be fully knowledgeable about the illicit tobacco trade. This lack of knowledge is also assessed in this study as it may negatively impact on the effectiveness of policies aimed at reducing the demand for illicit tobacco, and determine whether there is a need for greater awareness raising with regards to the illicit tobacco trade.

6.2 Study aims

The aim of this study was to explore the self-reported purchasing behaviour of smokers who reported illicit tobacco use in England in 2007-08 and 2010-11. This study had the following objectives:

1. Determine the prevalence of illicit tobacco use in 2007-8 and 2010-11 in England.
2. Determine the characteristics associated with self-reported illicit tobacco use among current smokers in England and whether these changed between 2007-8 and 2010-11.
3. Determine the proportion of illicit tobacco users' total tobacco consumption that was reported as illicit and whether this change over time.
4. Determine many illicit sources were reportedly used by smokers' and whether this changed between 2007-8 and 2010-11.
5. Determine why smokers believed the cigarettes or tobacco they purchased was so cheap.

6.3 Methods

6.3.1 Study design and sampling

Data for this study were collected in the Smoking Toolkit Study (STS) (www.smokinginengland.info) in December and March to May 2008 and from December 2010 to May 2011 (see Chapter 4 for detailed methodology). There is a cost to adding questions to the STS. In 2008 questions on sources of tobacco and cigarette purchase were funded by the charity Action on Smoking and Health (ASH); however funding constraints prevented the same questions from being included in the STS in January and February 2008. In 2010-11 data collection was funded by Cancer Research UK and these budget constraints were not present. It was therefore important that we collected data during these months in order to capture any effects

of New Year and the lead up to annual budget on smokers' purchasing behaviour.

Survey participants were drawn from aggregated output areas (containing 300 households) across all nine regions of England. These areas were stratified by ACORN (A Classification of Residential Neighbourhoods) characteristics (an established geo-demographic analysis of the population (<http://www.caci.co.uk/acorn/acornmap.asp>)) and region, and then randomly selected to be included in an interviewer's list. This approach to profiling ensures an appropriate mix of areas by socio-economic group.

6.3.2 Measures

Participants were eligible for inclusion in the current study if classified as current smokers. This was assessed by asking participants: 'Which of the following best applies to you? – I smoke cigarettes (including hand-rolled) every day; I smoke cigarettes (including hand-rolled), but not every day; I do not smoke cigarettes at all, but I do smoke tobacco of some kind (for example:- pipe or cigar); I have stopped smoking completely in the last year; I stopped smoking completely more than a year ago; I have never been a smoker (i.e. smoked for a year or more); Don't Know. Those who reported smoking cigarettes (including hand-rolled) every day or smoked but not every day were categorised as current smokers and included in the current study.

The STS questionnaire (Appendix 6.1) collected data on socio-demographic characteristics including gender, age and socio-economic status. Social status was categorised as follows: AB = higher and intermediate professional/managerial, C1 = supervisory, clerical, junior managerial administrative/ professional, C2 = skilled manual workers, D = semi-skilled and unskilled manual workers and E = on state

benefit, unemployed, lowest grade workers. The Heaviness of Smoking Index (HSI) which combines scores on cigarette consumption per day and time to first cigarette of the day was used as a measure of tobacco dependence (Kozlowski et al., 1994).

Illicit tobacco purchase was the primary outcome measure and was assessed by asking participants - 'In the last 6 months, have you bought any cigarettes or hand rolled tobacco from any of the following?: newsagent\off licence\corner-shop, petrol garage shop, supermarket, cash and carry, internet, pub (behind the bar), pub (vending machine), pub (somebody who comes round selling cigarettes cheap), people who sell cheap cigarettes on the street, people in the local area who are a ready supply of cheap cigarettes, buy them cheap from friends, buy them from abroad and bring them back with me, other, have not bought any in the last 6 months and don't know. Illicit tobacco purchases from pubs, personal foreign holidays, family or friends, cross border shopping and individuals selling cigarettes and tobacco at local market, door to door or just in the streets; have been documented in other studies as sources of illicit tobacco (Wiltshire et al. 2001; Joossens et al., 2012). Therefore participants who reported purchasing cheap tobacco from individuals that sell cheap cigarettes in the pubs, those that sell cheap cigarettes on the street, persons that are trusted sources of cheap cigarettes in the local area and buying cheap cigarettes from friends were classified as purchasing illicit tobacco. The purchase of cheap tobacco from friends could be viewed as ambiguous as participants could have obtained duty-paid cigarettes off friends for less than full price. However, users of illicit tobacco often source this cheap tobacco through social networks that may include work colleagues or neighbours who can be viewed as friends therefore this category was assumed to be illicit (NEMS, 2009).

Participants' purchasing behaviours were classified into 3 groups (duty-paid (DP)

only, DP and illicit tobacco and illicit tobacco only) to get a true measure of smokers' type of tobacco purchase. All participants were asked 'Thinking of all the cigarettes or hand rolled tobacco you have bought in the last 6 months, apart from what you bought abroad yourself, roughly how much of it would you say you got cheap? That is, how much of it did you pay less than standard shop prices for? Participants were able to respond with 'up to a quarter', 'more than a quarter - up to a half', 'more than a half - up to three quarters', 'more than three quarters', 'don't know' or none. Finally the questionnaire asked participants to state the reason they believed this tobacco was much cheaper than that sold in shops.

6.3.3 Statistical analysis

Data were analysed using SPSS 21.0. Prevalence data were analysed using descriptive statistics. To make prevalence data estimates representative of the English population these data were weighted using the rim (marginal) weighting technique. This is an iterative sequence of weighting adjustments whereby separate nationally representative target profiles were set based on the 2001 census (for gender, working status, prevalence of children in the household, age, social status and region) and the process repeated until all variables match the specified targets (Fidler et al., 2011).

The assumption of 'normality' required for ANOVA analysis was assessed using the Kolmogorov-Smirnov (K-S) statistic. Cigarette consumption was found to be statistically non – normal among those reporting purchases from DP sources only, illicit sources only and DP and illicit sources. Kruskal-Wallis tests were therefore applied to assess differences in cigarette consumption. Chi-squared analysis was used to test group differences for categorical variables. Finally, to assess associations between socio-demographic variables, smoking characteristics and illicit tobacco

purchase, forced entry logistic regression analyses were conducted. Statistical significance was set at $p < 0.05$.

6.3.4 Ethical approval

Ethical approval was granted by the University College London Research Ethics Committee.

6.4 Results

A total of 6,895 participants were surveyed in December 2007 and March to May 2008, of which 1,595 (23%) were current smokers. From December 2010 to May 2011, 12,302 participants were surveyed and 2,774 (22.5%) were current smokers. Participants classified as current smokers who responded 'none', 'don't know' or 'other' (mostly repetitions of answers already given or answers were not legible) to the question on the source of tobacco purchase were excluded ($n=43$ in 2007-8; $n=120$ in 2010-11). Table 6.1 shows the socio-demographic and smoking characteristics of participants split according to sources of tobacco purchases.

6.4.1 Prevalence of illicit tobacco use

Twenty per cent ($n=290$, 95%Confidence Interval (CI) 17.6–21.7) of current smokers in 2007-8 reported purchasing tobacco from illicit sources. This decreased to four percent in 2010-11 ($n=98$, CI 3.2-4.8). More males than females reported exclusive illicit tobacco use in 2007-8 ($\chi^2 = 19.23$ (df (degrees of freedom) 1, $p < 0.001$) and 2010-11 ($\chi^2 = 15.50$ (df 1), $p < 0.001$).

Exclusive illicit tobacco users smoked on average 15.8 (Standard deviation (SD) = 9.67) cigarettes per day in 2007-8, whereas exclusive duty-paid tobacco users smoked 12.7 (SD = 8.6) per day (F (df 2, 1440) = 14.87, $p < 0.001$). Similarly, in

2010-11 the mean (SD) daily cigarette consumption for exclusive illicit tobacco users was 16.1(9.8) and 12.2 (8.1) for exclusive duty-paid tobacco users (F (df 2, 2350) = 6.89, $p=0.001$). The majority of smokers reporting exclusive illicit tobacco purchase smoked RYO tobacco exclusively in 2007-8 (75%, $n = 39$) ($\chi^2 = 125.39$ (df 4), $p<0.001$) and 2010-11 (80.6%, $n = 29$) ($\chi^2 = 72.45$ (df 4), $p<0.001$). Exclusive illicit tobacco purchase was also mostly reported by smokers from lower socio-economic groups in 2007-8 ($\chi^2 = 33.65$ (df 8), $p<0.001$) and 2010-11 ($\chi^2 = 23.60$ (df 8), $p=0.003$).

There were regional variations in reports of illicit tobacco purchase at both time points (Table 6.2). Illicit tobacco trade appeared to be more concentrated in the North West of England in 2007-8, with 24.5% ($n=13$; CI 22.3 – 26.7) of exclusive illicit tobacco use and 18.2% ($n=36$; CI 16.2 – 20.2) of non-exclusive use made up of smokers in this region. In 2010-11, the East of England had the highest concentration of exclusive illicit tobacco users (25.0%; $n=10$, CI 23.3 – 26.7); whereas the South West (18.6%; $n= 11$, CI 17.1 – 20.2) and North West (16.9%, $n = 10$, CI 15.4 – 18.4) accounted for the highest proportion of non-exclusive illicit tobacco purchase (Table 6.2). These regional differences in reported illicit tobacco use although significant in 2007-8 ($\chi^2 = 28.97$ (df 16); $p = 0.024$) were not in 2010-11 ($\chi^2 = 21.14$ (df 16); $p = 0.173$). Although these regional differences are of interest, the numbers reported here are small and the STS is not powered to detect regional differences.

Table 6.1: Socio-demographic and smoking characteristics as a function of tobacco

	2007-8					2010-11				
	Total (n=1470)	Illicit tobacco only (n=55)	DP tobacco only (n=1180)	DP and illicit (n=235)	p value	Total (n=2424)	Illicit tobacco only (n=40)	DP tobacco only (n=2326)	DP and illicit (n=58)	p value
Age, (years) % (n)					p<0.001					p=0.018
16-24	21.2(311)	10.9(6)	19.5(230)	32.1(75)		19.4(470)	10.9(4)	19.1(444)	37.9(22)	
25-34	18.4(271)	14.5(8)	18.6(219)	18.8(44)		20.4(495)	15.0(6)	20.7(481)	13.8(8)	
35-44	22.3(328)	14.5(8)	22.4(264)	23.9(56)		19.3(467)	22.5(9)	19.4(452)	10.3(6)	
45-54	17.0(249)	25.5(14)	16.9(199)	15.4(36)		17.8(431)	20.0(8)	17.8(414)	15.5(9)	
55-64	11.8(174)	23.6(13)	12.4(146)	6.4(15)		13.8(334)	15.0(6)	13.7(318)	17.2(10)	
65+	9.3 (136)	10.9(6)	10.3(122)	3.4(8)		9.3(226)	17.5(7)	9.3(216)	5.2(3)	
Gender, % (n)					p<0.001					p<0.001
Male	50.9 (748)	61.8 (34)	48.1(567)	62.6(147)		54.0(1309)	65.0(26)	53.2(1238)	77.6(45)	
Female	49.1 (722)	38.2(21)	51.9(613)	37.4(88)		46.0(1115)	35.0(14)	46.8(1088)	22.4(13)	
Social status, % (n)					p<0.001					p=0.003
AB	15.4(227)	10.9(6)	17.2(203)	7.7(18)		15.4(374)	0(0)	15.8(367)	12.3(7)	
C1	24.1(354)	5.5(3)	25.1(297)	23.1(54)		26.5(643)	10.3(4)	26.8(623)	28.1(16)	
C2	25.5(375)	27.3(15)	24.2(286)	31.6(74)		24.1(583)	30.8(12)	24.2(563)	14.0(8)	
D	21.6(317)	35.4(19)	20.5(242)	23.9(56)		20.0(485)	35.9(14)	19.6(456)	26.3(15)	
E	13.4(197)	21.8(12)	13.0(153)	13.7(32)		13.9(337)	23.1(9)	13.6(317)	19.3(11)	
Type of Tobacco smoked, % (n)					p<0.001					p<0.001
Cigarettes	65.2(883)	21.2(11)	70.8(762)	48.7(110)		60.2(1191)	16.7(6)	61.9(1172)	26.5(13)	
Cigarettes & RYO	9.6(130)	3.8(2)	7.5(81)	20.8(47)		6.2(123)	2.8(1)	5.9(111)	22.4(11)	
RYO only	25.2(341)	75.0(39)	21.7(233)	30.5(69)		33.6(664)	80.6(29)	32.2(610)	51.0(25)	
Cigarettes per day (CPD), mean (sd)	13.4(8.75)	15.8(9.67)	12.7(8.6)	15.9(8.8)	p<0.001	12.3(8.2)	16.1(9.8)	12.2(8.1)	14.7(9.9)	p=0.001
Time to first cigarette,% (n)					p=0.002					p=0.225
>61 minutes	19.0(280)	7.3(4)	19.7(233)	18.3(43)		28.7(696)	20.0(8)	28.9(672)	27.6(16)	
31-60 minutes	29.1(428)	20.0(11)	31.2(368)	20.9(49)		19.6(475)	12.5(5)	19.8(461)	15.5(9)	
6-30 minutes	31.4(462)	40.0(22)	30.1(355)	36.2(85)		31.4(762)	32.5(13)	31.5(732)	29.3(17)	
<5 minutes	20.3(299)	32.7(18)	18.9(223)	24.7(58)		19.6 (474)	32.5(13)	19.1(445)	27.6(16)	

Note: Data weighted to match the 2001 census; n = Number; sd = Standard Deviation; RYO = 'roll your own' tobacco; DP = Duty paid; Social Status categories: AB = higher and intermediate professional/managerial, C1 = supervisory, clerical, junior managerial administrative/ professional, C2 = skilled manual workers, D = semi-skilled and unskilled manual workers and E = on state benefit, unemployed, lowest grade worker

Table 6.2: Reported purchase of illicit and duty-paid tobacco and cigarettes by English region in 2007-8 and 2010-11

	2007-8 %(n)			2010-11 %(n)		
	Illicit tobacco only	DP and illicit tobacco	DP only	Illicit tobacco only	DP and illicit tobacco	DP only
North East	3.8 (2)	6.8 (16)	5.2 (62)	7.5 (3)	10.2 (6)	6.0 (139)
North West	24.5 (13)	18.2 (43)	15.2 (179)	5.0 (2)	16.9 (10)	14.3 (333)
Yorkshire and the Humber	18.9 (10)	15.3 (36)	12.9 (152)	15.0 (6)	10.2 (6)	10.8 (252)
East Midlands	7.5 (4)	11.0 (26)	7.8 (92)	7.5 (3)	10.2 (6)	8.8 (204)
West Midlands	7.5 (4)	9.3 (22)	12.3 (145)	10.0 (4)	13.6 (8)	13.2 (306)
East of England	15.1 (8)	15.3 (36)	11.0 (130)	25.0 (10)	6.8 (4)	11.3 (262)
London	5.7 (3)	3.8 (9)	10.3 (122)	5.0 (2)	3.4 (2)	9.3 (217)
South East	7.5 (4)	12.3 (29)	15.7 (185)	15.0 (6)	10.2 (6)	15.9 (369)
South West	9.4 (5)	8.1 (19)	9.7 (114)	10.0 (4)	18.6 (11)	10.5 (243)

Note: Data weighted to match the 2001 census; n = Number; DP = Duty-paid

6.4.2 Sources of cigarette and tobacco purchase

Table 6.3 shows the proportion of participants who reported tobacco or cigarette purchase from duty-paid and illicit sources. The majority (70.4% in 2007-8 and 67% in 2010-11) of smokers in this sample reported tobacco and cigarette purchases from newsagents/off licence/corner-shop at both time points (Table 6.3). Most smokers who reported illicit tobacco purchase did this through friends, followed by trusted sources of cheap tobacco in the area at both time points.

Table 6.3: Sources of smokers' duty-paid and illicit tobacco and cigarette purchases in England in 2007-08 and 2010-11

	2007-8		2010-11	
	% (n)	95% CI	% (n)	95% CI
Sources of duty-paid tobacco				
Newsagent/ Off licence/Corner-shop	70.4 (1036)	68.1 – 72.7	67.0 (1624)	65.1 – 68.9
Petrol garage	39.0(573)	36.5 – 41.5	26.8(649)	25.0 – 28.6
Supermarket	67.0(985)	64.6 – 69.4	57.9 (1403)	55.9 – 59.9
Cash and carry	2.9(43)	2.0 – 3.8	2.5(61)	1.9 – 3.1
Internet	0.7(10)	0.3 – 1.1	0.5(11)	0.2 – 0.8
Pub (behind the bar)	5.7(84)	4.5 – 6.9	1.7(41)	1.2 – 2.2
Pub (vending machine)	7.0 (102)	5.7 – 8.3	2.8(68)	2.1 – 3.5
Buy them from abroad and bring them back with me	17.5(258)	15.6 – 19.4	5.5 (134)	4.6 – 6.4
Sources of illicit tobacco				
Pub (someone who comes round selling cheap cigarettes)	3.4(51)	2.5 – 4.3	0.8(19)	0.5 – 1.2
People who sell cheap cigarettes in the street	5.3(78)	4.1 – 6.5	0.6(14)	0.3 – 0.9
People in the local area who are trusted sources of cheap cigarettes	6.6(97)	5.3 – 7.9	0.9(23)	0.5 – 1.3
Buy them cheap from friends	12.7(187)	11.0 – 14.4	2.4(59)	1.8 – 3.0

Note: Data weighted to match the 2001 census; Responses were not mutually exclusive

Smokers who reported both duty-paid and illicit tobacco purchase in 2007-8 used multiple illicit sources at both time points (Table 6.4). In 2010-11, 78.1% (n = 45) of smokers who purchased both illicit and duty-paid tobacco reported using only one source, 17.4% (n = 10) used two sources and 4.5% (n = 2) used more than two sources. The majority of smokers who reported exclusive illicit tobacco reported using either one or two sources in 2007-8 and 2010-11 (Table 6.4). Overall, the percentage of smokers who reported using more than one illicit source for their

tobacco purchase decreased from 27.4% (n=86) in 2007-8 to 10.9% (n=12) in 2010-11 ($\chi^2 = 18.14$; (df 2), $p \leq 0.001$).

Table 6.4: Number of sources reportedly used by smokers to purchase illicit tobacco in 2007-8 and 2010-11

Number of sources used	2007-08 % (n)		2010-11 % (n)	
	Illicit tobacco only	Both licit and illicit	Illicit tobacco only	Both licit and illicit
1	89.8 (49)	66.0 (155)	100.0 (40)	78.1 (45)
2	10.2 (6)	20.1 (47)	0 (0)	17.4 (10)
3	0 (0)	11.9 (28)	0 (0)	2.4 (1)
4	0 (0)	2.1 (5)	0 (0)	2.1 (1)

Note: Data weighted to match the 2001 census; n = Number

6.4.3 Characteristics associated with illicit tobacco purchase

Determining the characteristics associated with exclusive illicit tobacco purchase or dual use of duty-paid and illicit sources resulted in unstable logistic regression models due to the small sample sizes in these sub-groups at both time points. Therefore, the associated characteristics with any illicit tobacco use were assessed instead. In 2007-8 the odds of reporting any illicit tobacco purchase was higher in young smokers (aged 16 – 24) (OR=2.57, $p=0.001$); males (OR=1.52, $p=0.003$); those who smoke RYO tobacco (OR=2.81, $p<0.001$); those with low socio-economic status (C2 (OR=2.24, $p=0.013$); D (OR=2.19, $p=0.019$); E (OR=2.00, $p=0.036$) and with high tobacco dependence (OR=1.21, $p<0.001$; Table 6.5).

Table 6.5: Associations between socio-demographic characteristics and tobacco dependence with report of illicit tobacco purchase in England in 2007-8 and 2010-11

	2007-8			2010-11		
	OR	95% CI	p value	OR	95% CI	p value
Sex						
Men	1.52	1.15 – 1.99	0.003	1.77	1.15 – 2.73	0.010
Women	<i>Reference</i>			<i>Reference</i>		
Age						
16-24	2.57	1.46 – 4.52	0.001	1.15	0.54 – 2.41	0.721
25-34	1.76	1.00 – 3.10	0.051	0.65	0.30 – 1.43	0.288
35-44	1.52	0.87 – 2.65	0.145	0.80	0.37 – 1.72	0.568
45-54	1.45	0.82 – 2.58	0.204	0.67	0.30 – 1.49	0.322
55-64	1.20	0.65 – 2.22	0.566	1.09	0.50 – 2.36	0.830
65+	<i>Reference</i>			<i>Reference</i>		
Social status						
AB	<i>Reference</i>			<i>Reference</i>		
C1	1.56	0.80 – 3.05	0.190	1.31	0.47 – 3.69	0.609
C2	2.24	1.18 – 4.26	0.013	0.97	0.34 – 2.78	0.954
D	2.19	1.14 – 4.24	0.019	2.00	0.74 – 5.40	0.170
E	2.00	1.05 – 3.80	0.036	1.87	0.71 – 4.93	0.207
Tobacco dependence						
HSI	1.21	1.11 – 1.33	p<0.001	1.13	0.99 – 1.29	0.074
Smokes RYO	2.81	2.13 – 3.69	p<0.001	5.07	3.08 – 8.37	p<0.001

Note: OR = Odds ratio, CI = Confidence interval, Social status categories: AB = higher and intermediate professional/managerial, C1 = supervisory, clerical, junior managerial administrative/ professional, C2 = skilled manual workers, D = semi-skilled and unskilled manual workers and E = on state benefit, unemployed, lowest grade workers; HSI = Heaviness of Smoking Index; RYO = 'roll your own' tobacco

Notably, in 2010-11 only gender and RYO use significantly predicted illicit tobacco purchase (Table 6.5). Men had greater odds of reporting illicit tobacco use (OR=1.77, p=0.010) compared with women, and increased odds in 2010-11 compared to 2007-8. Use of RYO tobacco also strongly predicted illicit tobacco use in 2010-11 (OR=5.07, p<0.001). There was no evidence of an association between illicit tobacco use and age, social status and tobacco dependence in 2010-11. This shift in the socio-demographic characteristics of those reporting illicit tobacco use could account for the apparent change in prevalence observed in this study. To assess this and examine the change in the relationship between demographics and illicit use, time by demographic interaction terms were included in the logistic

model. This revealed strong interactions with time (Table 6.6).

Table 6.6: Interaction effects of time and socio-demographic factors and tobacco dependence

	Unadjusted			^a Adjusted		
	OR	95% CI	p value	OR	95% CI	p value
Time 1 (2007-8)	2.88	2.49 – 3.33	p<0.001	2.84	2.45 – 3.29	p<0.001
Time 2 (2010-11)	0.55	0.45 – 0.68	p<0.001	0.50	0.41 – 0.62	p<0.001
Interactions						
Time*Age	.991	0.98 – 1.00	p<0.001	0.99	0.99 – 1.00	p=0.547
Time*Sex	1.14	1.06 – 1.23	p=0.001	0.98	0.89 – 1.09	p=0.800
Time*SS	0.99	0.94 – 1.06	p=0.889	0.96	0.89 – 1.04	p=0.373
Time*Tobacco dependence	1.11	1.08 – 1.14	p<0.001	1.01	0.97 – 1.04	p=0.607

Note: OR = Odds ratio, CI = Confidence interval; SS = Social status; ^a Adjusted for age, sex, social status and tobacco dependence

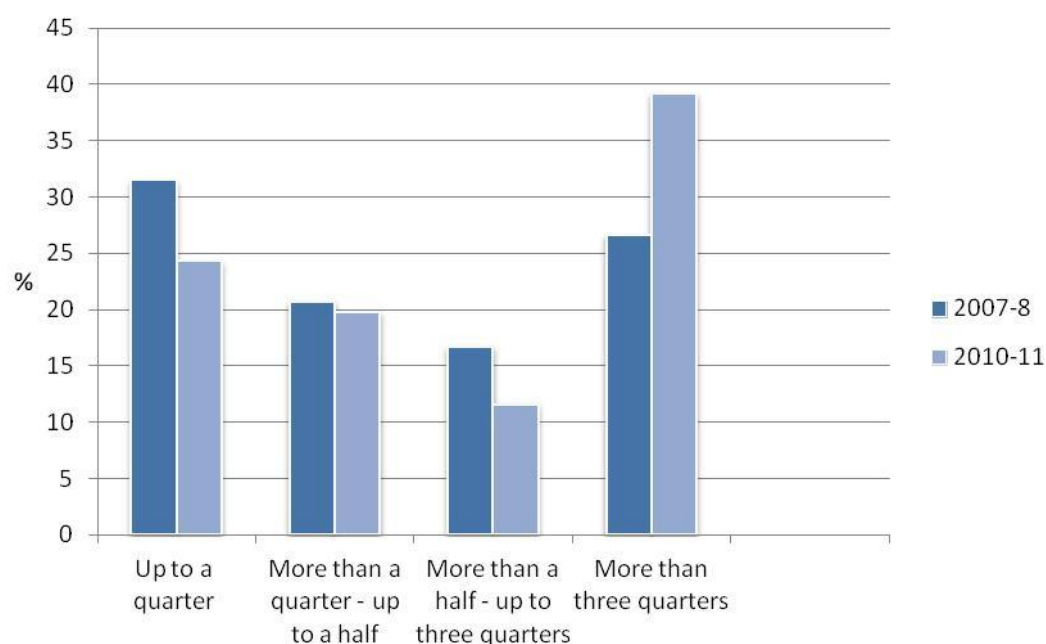
Although there were strong interactions with time and socio-demographic factors and tobacco dependence, after adjusting for possible confounders these interactions were not significant. This indicates that the difference in prevalence observed between 2007-8 and 2010-11 was not dependent on demographic sub groups or tobacco dependence. Furthermore, the reduction in illicit tobacco use observed between the two time points was statistically significant, even after controlling for socio-demographic and tobacco dependence variables (Table 6.6).

6.4.4 Proportion of smokers' consumption consisting of illicit tobacco

In 2007-8, 31.5% (n = 91) of illicit tobacco users reported that up to a quarter of their total tobacco consumption was made up of cheap illicit cigarettes or tobacco. Twenty one percent (n = 60) indicated that the proportion of illicit cigarettes of tobacco was more than a quarter and up to a half, 16.7% (n = 48) reported more than a half and up to three quarters and 26.6% (n = 77) reported more than three quarters. In 2010-11, 24.3% (n = 24) reported that up to a quarter of their total tobacco consumption was made up of illicit tobacco. Twenty per cent (n = 19) responded that

this was more than a quarter and up to a half, 11.6% (n = 11) stated more than a half – up to three quarters and 39.2% (n = 38) indicated more than three quarters.

Figure 6.1: The proportion of illicit tobacco users' total tobacco consumption made up of illicit tobacco

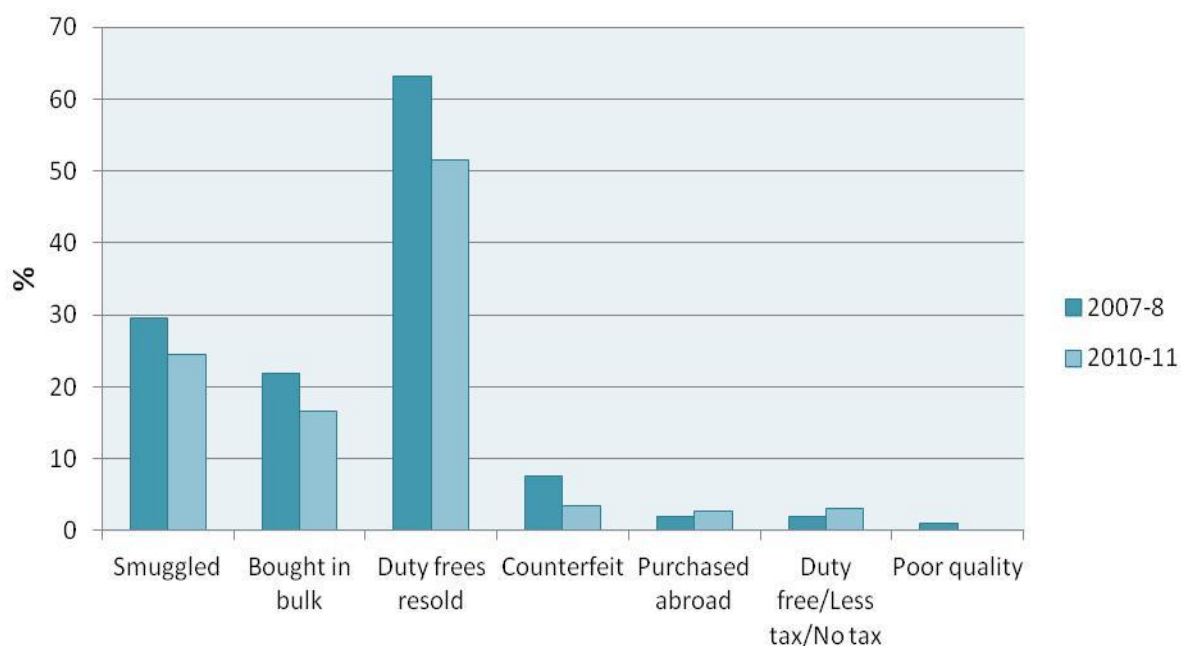


Note: Data weighted to match the 2001 census

6.4.5 Smokers' beliefs on the provenance of illicit tobacco

Over half of the smokers in 2007-8 and 2010-11 (63.1% (n = 174) and 51.5% (n = 48) respectively) believed that the tobacco or cigarettes that they purchased from illicit sources was much cheaper than legally sold tobacco products because individuals resold duty free cigarettes purchased abroad (Figure 6.2). Whereas, 29.6% (n = 82) in 2007-8 and 24.5% (n = 23) in 2010-11 supposed the tobacco or cigarettes purchased was cheaper because it was smuggled and resold. A further 21.9% (n = 61) in 2007-8 and 16.7% (n = 15) in 2010-11 believed it was because the tobacco or cigarettes were bought in bulk and resold. Only 7.6% (n = 21) in 2007-8 and 3.4% (n = 3) in 2010-11 considered the tobacco or cigarettes they purchased as cheap because it was counterfeit.

Figure 6.2: Smokers' beliefs on the provenance of illicit tobacco purchased in 2007-8 and 2010-11



Note: Data weighted to match the 2001 census; Responses were not mutually exclusive

6.5 Discussion

Twenty per cent of current smokers in England reported purchasing illicit tobacco in 2007-8. This decreased to 4% in 2010-11. Reports of exclusive illicit tobacco purchase also declined between 2007-8 and 2010-11. The most commonly used source for illicit tobacco purchase at both time points was friends. Moreover, smokers who reported exclusive and non-exclusive illicit tobacco purchase appeared to do this through multiple sources in 2007-8. However, in 2010-11 there appeared to be a shift towards the use of single sources by exclusive and non-exclusive buyers. Those reporting any illicit tobacco purchase were more likely to be young, male, smokers of RYO tobacco, from low socio-economic groups and with high tobacco dependence in 2007-8. In 2010-11 being male and a RYO smoker were the only factors significantly associated with illicit tobacco purchase. Most smokers reported illicit tobacco making up at least a quarter of their total tobacco

consumption in 2007-8 and 2010-11. However, the number of illicit tobacco users reporting it making up more than three quarters of their total tobacco consumption increased between 2007-8 and 2010-11. At both time points, most smokers believed the cheap tobacco they purchased was cheap because it was duty free or smuggled.

There appeared to be a marked decline in self-reported illicit tobacco use between 2007-8 and 2010-11, by approximately 80%. This fall in illicit tobacco use could be attributed to a number of factors. Firstly, between 2007-8 and 2012, cigarette smoking prevalence in England decreased from 24.1% to 20.3% (West and Brown, 2011). Moreover, tobacco policies such as the ban on smoking in indoor public places and workplaces implemented in July 2007 (UK Parliament, 2011), raising the legal age for purchasing tobacco from 16 to 18 in October 2007 and the ban on sale of tobacco products from vending machines in October 2011 (UK Parliament, 2010) may have impacted on participants' smoking behaviour as well as their purchasing behaviour. However, the scale of decline reported by this study is not consistent with other estimates of the illicit tobacco trade at these time points (HMRC, 2011c; Klynveld Peat Marwick Goerdeler (KPMG) 2011; HMRC, 2012). These figures however are for the UK and not England and so it may be that England has shown a greater decline in illicit tobacco use than elsewhere. Additionally, the illicit trade by its very nature being a hidden activity with considerable methodological restrictions and difficulties in determining estimates may account for the disparities in measures of its use. For instance, there is the possibility that the launch of the HMRC and Department of Health illicit tobacco marketing strategy in September/October 2010 (HMRC, 2011a) may have resulted in under-reporting by participants reluctant to admit illicit tobacco purchase; perceiving it to be socially unacceptable. However, presently in the UK the purchase of illicit tobacco is not illegal but its sale is. Moreover, new illicit sources may have emerged which were unknown of at the time

of data collection and so were not accounted for. Nonetheless, this study's finding illustrates the need for routine transparent and robust data on illicit tobacco trade (Sweeting et al., 2009). There is a call for more evidence-based responses to the tobacco industry's claims about the illicit tobacco trade, that build on high-quality and independent research and provide more accurate estimates of the illicit trade (Fooks et al., 2013).

The majority of smokers who purchased illicit tobacco reported doing so through friends. This finding mirrors that of a survey carried out in the North of England in 2011, which reported 50% of illicit tobacco buyers doing so through friends in comparison to 13% from family members (NEMS, 2011). However, smokers' relationship with these so called 'friends' is unclear. Rather than being genuine friendships, it is possible that these include no more than mutually beneficial relationships between a buyer and illicit seller. Alternatively, it is likely that smokers build friendships with people known to sell cheap illicit tobacco in their community. There is evidence that social networks play an important role in the dissemination of information regarding the illicit cigarette trade (Ketchoo et al., 2011) and so friends may not be the sellers but the conduit through which the purchase of illicit tobacco takes place. Nonetheless, this finding does imply that illicit tobacco is easily accessible within smokers' social networks, with ready supplies in their communities. This is further supported by the evidence in this study of smokers citing multiple sources of illicit tobacco. This study shows evidence of a move towards the use of single illicit sources from multiple sources between 2007-8 and 2010-11. This could possibly be as a result of the elimination of some sources through government interventions making it more difficult to access illicit tobacco, which could also explain the decline in reported illicit tobacco use during this time period. Alternatively, smokers may decide to stick to their preferred source of illicit

tobacco due to factors such as price, convenience and quality of the product. More research into illicit tobacco sources could offer up a better understanding of smokers' use of illicit sources.

Overall, smokers who purchased illicit tobacco were more likely to be young, male, from low socio-economic groups and with high tobacco dependence. Firstly, this finding is congruent with that of studies elsewhere which found that being young, male, from a deprived background and high tobacco dependence were significant indicators of increased likelihood of illicit tobacco purchase (Lee and Chen, 2006; Lee et al., 2009; Taylor et al., 2005; Tsai et al., 2003, Heydari et al., 2010, Callaghan et al., 2009; Chen et al., 2010). Secondly, this finding points to the motivation for engaging in this price-minimising behaviour as young smokers (Chaloupka and Pacula, 1999; Ross and Chaloupka, 2003) and smokers from low socio-economic groups (Farrelly et al., 2001) have been found to be more price sensitive. It is important to note however, that this study identified a trend of older smokers being exclusive illicit tobacco users while young smokers tended to be non-exclusive users in 2007-8 and 2010-11. A reason for this may be because older smokers have established networks, whereas young smokers are more opportunistic buyers. The strong association observed between illicit tobacco use and tobacco dependence could be due to more dependent heavy smokers engaging in price minimising behaviours in response to high tobacco prices. This would suggest that financial savings are potentially larger and more important for these smokers.

Illicit tobacco users were also more likely to report RYO tobacco purchase rather than manufactured cigarettes. This could be due to smokers of RYO also being mostly male, from poorer backgrounds and being heavier smokers (Young et al., 2006). Additionally, a study of illicit tobacco use and RYO tobacco found that a

higher proportion of illicit tobacco use was observed in smokers who reported RYO use (Joossens et al., 2012). This could be because RYO tobacco may be attractive to smokers looking to minimise the price paid for their tobacco dependence, as RYO tobacco can be rolled more thinly and with less tobacco so they pay less overall than for manufactured cigarettes and can make the money paid go further. Another contributor could be that general RYO tobacco use increased over this period; as indicated by HMRC figures which reported duty-paid RYO purchases increased from 5% in 2007-8 to 8% in 2010-11 (HMRC, 2012a). Furthermore, illicit RYO makes up a much larger proportion of the overall RYO market share (38%) compared with illicit cigarettes (9%) (HMRC, 2012b).

Although an overall reduction in illicit tobacco use was observed in this study, there was a notable change in the factors associated with illicit tobacco use over time. This observation clearly illustrates the changing nature of smokers' purchasing behaviour; with men and smokers of RYO tobacco being the only sub-population statistically associated with reports of illicit tobacco purchases in 2010-11 compared with 2007-8. A possible reason for this could be that male and RYO smokers are more established illicit tobacco users and less influenced by strategies aimed at deterring illicit tobacco use. Continuous monitoring of the purchasing behaviour of smokers is required if effective interventions to counter illicit tobacco trade are to be developed.

Interestingly, the number of illicit tobacco users' reporting that illicit tobacco made up more than three quarters of their total tobacco consumption appeared to increase between 2007-8 and 2010-11. On the other hand, those smokers reporting that it made up a quarter or less of their total tobacco consumption decreased between the two time points. This suggests that although there has been a reduction in the prevalence of illicit tobacco use, those who continue to purchase illicit tobacco are

becoming more reliant on this illicit market. This may be as a result of the onset of the economic recession in 2008/2009 creating more economic hardship, particularly for those in deprived groups who are more likely to partake in and report illicit tobacco purchase, and in turn making caused them even more dependent on the illicit market.

Both in 2007-8 and 2010-11 most smokers in this study concluded that the illicit tobacco or cigarettes they purchased were cheap due to their being duty free purchases from abroad or smuggled products being resold. This is an important finding which illustrates smokers' knowledge and understanding of the illicit tobacco market. There appeared to be the belief that the tobacco products purchased were legally manufactured and not counterfeit. This is significant and suggests that messages aimed at shifting smokers purchasing beliefs would have little effect if focused on counterfeit tobacco and the dangers and possible health risks attached to its use. In addition, it could be the case that smokers associate counterfeit tobacco products to criminality but not bootlegged or smuggled tobacco products as these maybe viewed as 'white van' trade and harmless. Therefore, greater focus on increasing smokers' awareness of tobacco smuggling/bootlegging and its connections to other criminal activities, as in interventions such as the North of England Programme (see Chapter 5), may encourage a change in their purchasing behaviour.

There were a number of limitations in this study as with most survey-based studies. Firstly, this study relied on retrospective reports on purchasing at any point in the previous 6 months and so is subject to recall bias. Secondly, it is possible that various events taking place at the time of data collection could have influenced the findings, most notably the implementation of the smoking ban in public places in

2007, budget day (when the government officially announces its plans for spending over the coming year in compliance with policies), plus the implementation of new strategies by HMRC and UKBA to combat illicit tobacco trade. Thirdly, some smokers may not have been willing to report purchase of cheap ‘illicit’ cigarettes in a face-to-face survey; however this is unlikely as the purchase of illicit tobacco is not illegal in the UK. Fourthly, there is a lack of data on ethnicity in the STS, a factor which may have revealed a significant association to illicit tobacco purchase. Most of these factors however, would be unlikely to have affected the two surveys differentially and hence the main finding of a decline in use of illicit tobacco between 2007-8 and 2010-11 in this sample is likely to be robust.

Further research into the beliefs and views of those who purchase illicit tobacco is necessary to better understand the motivations behind their illicit tobacco purchasing behaviour. This could inform the development of targeted social marketing messages aimed at changing their tobacco purchasing behaviour. In addition, more research into exploring the findings observed in this study such as sources of illicit tobacco purchase, how often illicit tobacco is purchased and quantity of illicit tobacco purchased at a particular time and illicit tobacco traders is needed for evidence-based policies to combat illicit tobacco trade.

6.6 Conclusion

A significant number of smokers are able to access cheap cigarettes from various illicit sources. This study’s findings suggest that illicit tobacco use is more prevalent in young smokers, male, low socio-economic groups, smokers with high tobacco dependence and smokers of RYO tobacco. It seems that, despite the reduction in reported illicit tobacco use between 2007-8 and 2010-11, its purchase appears embedded in certain sub-groups. Having said this, the associated characteristics of

those who reported illicit tobacco use seem to have changed over time. It is important that the characteristics of smokers who purchase illicit tobacco are monitored continuously in order to implement effective targeted interventions to combat illicit tobacco use. Future policies and campaigns in England need to be tailored to smokers identified as most likely to purchase illicit tobacco in order to have an impact on reducing demand for illicit tobacco; thereby complementing tobacco tax policies to encourage smoking cessation.

CHAPTER 7

VIEWS AND BELIEFS OF SMOKERS WHO REPORT ILLICIT TOBACCO USE: AN INTERVIEW STUDY

7.1 Introduction

In March 2011, the Government released a new tobacco control plan for England (Department of Health (DH), 2011); aimed at reducing smoking prevalence among adults to 18.5% by 2015 (as of 2011 this was 20% - ONS, 2013). This was accompanied by a ban on the sale of tobacco products from vending machines in October 2011. New tobacco control policies (as with old ones) are undermined by the existence of illicit tobacco trade. In order to intercept this illegal trade, in April 2011 HMRC and the UK Border Agency (UKBA) launched a new strategy to combat illicit trade in tobacco products which included: regulatory change-introducing fiscal marks and supply chain legislations, disrupting the supply and distribution chains, increased sanctions (including strong seizure and restoration policy) and tackling demand by raising public awareness (HMRC, 2011a). On the international front, the WHO FCTC Intergovernmental Negotiating Body on the illicit tobacco trade protocol met four times between 2008 and 2010 to decide on a supplementary treaty to tackle illicit tobacco trade. Measures implemented by HMRC/UKBA and proposed by the WHO FCTC focus on controlling the supply chain, however in order to successfully curb the use of illicit tobacco products it is vital that demand is addressed also. To do this, there is the need to understand the views, beliefs and purchasing behaviour of those who report illicit tobacco use.

Currently, there is limited qualitative research investigating the views and beliefs of those who engage in illicit tobacco trade. One of the first studies to explore the views

and attitudes of illicit tobacco users in the UK was conducted over a decade ago. It provided useful insights into illicit tobacco use, such as the finding that smokers in deprived areas were able to easily access cheap tobacco through networks in the community (Wiltshire et al., 2001). These low-income smokers viewed the smuggling network positively, as a way of dealing with the high cost of cigarettes and there was the feeling that the high price of tobacco is the government's means of exploiting poorer people (Wiltshire et al., 2001). Although producing relevant findings on illicit tobacco use in a deprived community, this study did not include smokers that explicitly reported purchase of illicit tobacco. A study conducted in Scotland found that smokers viewed counterfeit tobacco and cigarettes as readily identifiable due to the way it was acquired through chance offerings and its cheap price (Moodie et al., 2011a). Smokers' perception of illicit tobacco was also mostly negative, particularly for counterfeit tobacco as this was seen as poor quality and causing ill health (Moodie et al., 2011a). This study focused only on the pack appearance and product performance of illicit tobacco and not on smokers' overall beliefs, purchasing behaviour and views on illicit tobacco. An additional study conducted in Thailand reported that illicit tobacco was easily obtainable by smokers, and its use was popular and socially acceptable in the community (Ketchoo et al., 2011). In addition, smokers concluded that illicit cigarettes enabled them maintain their smoking and saved money (Ketchoo et al., 2011). Moreover, although smokers in this sample suspected that illicit cigarettes may be more harmful than legitimate duty-paid cigarettes they were undeterred and purchased them primarily for reducing their cigarette expenditure (Ketchoo et al., 2011). A study conducted more recently in a deprived community in England, found that there was widespread use of 'fag houses' (individuals selling cigarettes and tobacco from their own homes) to access cheap tobacco (Stead et al., under review). In addition, easy access to illicit tobacco was perceived to facilitate and sustain smoking (Stead et al., under review).

Although providing useful findings, this study consisted of only males and opportunistic illicit tobacco users (purchased at least three packets of illicit cigarettes in the previous six months). The current study was the first of its kind as it is, to our knowledge, the only recent qualitative study set up specifically to explore and understand the illicit tobacco market from a consumer perspective in England.

7.2 Study aims

The main aim of the current study was to gain a better understanding of smokers' use of, beliefs and views on illicit tobacco.

This study had the following objectives:

1. To determine smokers' knowledge and understanding of illicit tobacco.
2. To investigate smokers' sources of illicit tobacco, including supply and access.
3. To explore smokers' purchasing behaviours and reasons for purchasing illicit tobacco.
4. To explore smokers' attitudes and views on the illicit tobacco trade.

7.3 Methods

Interviews were conducted between October and December 2011.

7.3.1 Ethical approval

The study was approved by the University College London Research Ethics Committee in June 2011; ethics number- 2988/001 (Appendix 7.1).

7.3.2 Recruitment

An advertisement was placed in local morning and evening newspapers (Metro and Evening Standard – see Appendix 7.2). One advert was placed in each newspaper,

for one day. Smokers who were interested in taking part in the study were asked to respond by calling the number advertised. The call line was manned during office hours (9am-6pm) and each call received was logged (Appendix 7.3). Calls made during out of office hours were directed to an answer machine requesting callers to leave their name and number (Appendix 7.4). These callers were contacted the following day. Callers were asked a series of screening questions when they called in (Appendix 7.5) to ensure that only callers who met the inclusion criteria were invited to take part in the study. These screening questions enquired about smoking status, the last time they purchased cheap tobacco and how much was paid for it. The study inclusion criteria were as follows: current regular smokers (defined by asking callers if they were a smoker) who regularly purchased some form of illicit tobacco (validated by determining whether price quoted by the callers was as cheap as suggested in literature i.e. 50% or 75% less than legitimate tobacco prices) (West et al., 2008; Financial Action Task Force (FATF), 2012).

7.3.3 Participants

Those who met all the inclusion criteria were invited to take part in the study and an interview date was set. This was followed up by a reminder text or email sent two days (or the day before in some instances) before the interview date to confirm dates and times of interviews. Participants were current smokers who reported regular use/purchase of illicit tobacco. A total of 77 calls were received, of which 31 met the criteria and were initially invited to take part in the study. However, the interview process was curtailed after 25 interviews due to theoretical saturation. To establish anonymity, each participant was assigned an unidentifiable code. Participants were reimbursed for their time and travel to the total of £30.

7.3.4 Measures

The interview topic guide (Appendix 7.6) drew upon findings from previous studies, directly addressed the study objectives and was reviewed by the research supervisors. The interview topic guide focused on smokers' understanding of illicit tobacco, details of their illicit tobacco purchase and their views, attitudes and illicit tobacco purchasing behaviour. Interviews did not strictly follow the set order of questions as shown in the interview guide, nor were the wording of questions the same for all participants. The interview questions and order of questioning depended on participants' responses to initial questions, however all areas of the interview schedule were covered. Some additional questions that occurred to the interviewer during the interview were also asked and, if a topic was raised by the participant that was previously unknown, this was explored further.

7.3.5 Procedure

All interviews were conducted by the main researcher and took place in a private room, on University College London premises. Prior to the interview commencing, participants were asked to read the participant information sheet (Appendix 7.7); given the opportunity to ask questions and if satisfied asked to sign the consent form (Appendix 7.8). Participants were then asked to complete a short questionnaire aimed at collecting information on socio-demographic and smoking characteristics (Appendix 7.9). Semi-structured interviews were conducted with the aim of getting a rich narrative of the smokers' knowledge of illicit tobacco and their beliefs and views on its use. Open-ended questions were asked, in order to explore the views and beliefs of participants on the main topic areas. These were followed by probe questions to get an in-depth understanding of a particular subject matter (Ritchie and Lewis, 2005). All interviews were recorded using a standard digital audio recording device. On average the interviews were 35 minutes long (range: 20 – 58 minutes).

7.3.6 Data analysis

All interviews were transcribed verbatim (Appendix 7.10) and analysed using ‘Framework Analysis’ (Ritchie and Spencer, 1994) by the author, without any assistance of qualitative analysis software. Framework analysis was adopted because it is suited for research that has specific questions, a limited time frame, pre-designed sample (e.g. current smokers reporting purchasing cheap tobacco) and *a priori* issues that need to be addressed (Ritchie and Spencer (1994), Srivastava and Thomson (2009)). Framework analysis is a systematic, matrix based approach to qualitative data analysis used to classify and organise data according to key themes, concepts and emergent categories (Ritchie et al., 2003). As a result, a series of main themes, subdivided by a succession of related subtopics is developed. The process comprised of five connected stages involving: familiarization, identification of a thematic framework, indexing, charting, mapping (summarising and synthesising of data) and interpretation (Bryman and Burgess, 2000). First, the transcripts were examined line-by-line to determine important core themes based on *a priori* issues and emergent themes. These themes were then applied to further transcripts in order to refine them and to pull together the key characteristics of the data set as a whole. This was achieved by lifting data from their original context and arranging them under the appropriate thematic reference (Indexing and Charting) (Appendix 7.11).

The themes uncovered from the interview data were then mapped and interpreted according to issues raised by the interview topic guide (*a priori* issues) and those discovered from the interview process. This generated a few super-ordinate and several subordinate themes, providing an overall picture of the information gathered from the interviews. Transcription and analysis of the data was primarily conducted by the student and then second coded by an experienced independent researcher.

Both researchers discussed the coding and then the main researcher recoded the data a second time with the aim of pulling out any themes previously missed. After this, there was 100% agreement between sets of codes.

7.4 Findings

Participants in the current study were mostly White British (52%), male (76%), with low social status (64%) and an average age of 42 years (see Table 7.1).

Table 7.1: Socio-demographic and smoking characteristics of interview participants

Participants Characteristics	
Gender % (n)	
Male	76 (19)
Female	24 (6)
Social grade % (n)	
ABC1	36 (9)
C2DE	64 (16)
Ethnicity % (n)	
White British	52 (13)
Black British	16 (4)
Asian	8 (2)
Other: Chinese	4 (1)
Kurdish	4 (1)
Turkish	8 (2)
Austrian	4 (1)
Prefer not to say	4 (1)
Age (years) mean	42
Daily cigarette consumption mean	17
Type of Tobacco smoked % (n)	
Manufactured only	44 (11)
Manufactured & RYO	24 (6)
RYO only	32 (8)

Following the stages of framework analysis, 28 themes on smokers' beliefs and views on illicit tobacco emerged. These were organised under eight over-arching themes as follows: smokers' definition and use of illicit tobacco, the illicit tobacco product, price of illicit tobacco, sources of illicit tobacco, views on illicit tobacco

traders, views on the impact of illicit tobacco, moral stance on illicit tobacco trade and smokers' views on tackling the illicit tobacco trade (Figure 7.1).

Figure 7.1: Thematic framework

1. SMOKERS DEFINITION AND USE OF ILLICIT TOBACCO 1.1 Understanding of the term 'cheap tobacco' 1.2 Brands of illicit tobacco purchased 1.3 Span of illicit tobacco purchase 1.4 Quantity of illicit tobacco purchased 1.5 Exclusivity of illicit tobacco purchase 2. SOURCES OF ILLICIT TOBACCO 2.1 Sources used by smokers 2.2 Discovery of illicit tobacco source 2.3 Ease of access to illicit tobacco source 2.4 Supply (frequency) of illicit tobacco purchase 3. THE ILLICIT TOBACCO PRODUCT 3.1 Distinguishing between illicit tobacco products 3.2 Negative views on counterfeit tobacco 3.3 Variation in quality of tobacco by illicit source 3.4 Health warnings on illicit tobacco products 4. PRICE OF ILLICIT TOBACCO 4.1 Prices reportedly paid for illicit tobacco 4.2 Price as justification for illicit tobacco purchase 4.3 Beliefs on why illicit tobacco is cheap 4.4 Negative views on tobacco taxation	5. ILLICIT TOBACCO TRADERS 5.1 Perceptions of illicit tobacco traders 5.2 Traders' sales techniques 6. VIEWS ON THE IMPACT OF ILLICIT TOBACCO TRADE 6.1 Impact on smoking behaviour 6.2 Impact on the local community 6.3 Impact on health 7. MORAL STANCE ON ILLICIT TOBACCO TRADE 7.1 Views on the illegality of illicit tobacco trade 7.2 Beliefs on illicit tobacco trade's connection to organised crime and terrorism 7.3 Views on the sale of illicit tobacco to under-aged smokers 7.4 Concern over illicit tobacco encouraging criminality 8. TACKLING ILLICIT TOBACCO TRADE 8.1 Discouraging illicit tobacco purchase 8.2 Possibility of eliminating illicit tobacco
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7.4.1 Smokers' definition and purchase of illicit tobacco

7.4.1.1 *Understanding of the term 'cheap tobacco'*

Smokers had varying interpretations of the term 'cheap tobacco'. A few stated that this term was used to define cigarettes or tobacco that was not purchased from the shops or cheaper than what is sold in the shops.

'That you're not buying from a shop, that you're buying off a market or you're buying it from like tax free that's my understanding' (F2 – 38 year old female, monthly buyer).

Smokers understood cheap tobacco to mean the purchase of tax or duty free cigarettes and tobacco. In addition, they assumed 'cheap tobacco' to indicate fake, counterfeit or lower quality tobacco products. Words like 'smuggled', 'bootlegged', 'dodgy' and 'foreign brands' were viewed as synonymous to cheap tobacco.

'Well I just put it down as your looking for a polite phrase of bootleg, dodgy, import, UK not tax paid so...either imported as in smuggled or bootleg as in brand copied, lower quality tobacco with...made to look like it's the real thing basically. Yeah that's what I thought so...you know stuff where the government is losing on taxes basically' (M6 – 47 year old male, weekly buyer)

There was the belief that cheap tobacco was mostly from individuals smuggling in tobacco from low tax jurisdictions and so called 'booze cruises'.

'You only have to wait for a ferry so long from Dover or wherever it is. There is more than one point to get to France or to Calais and you can buy stuff there. What they call the 'booze cruises' right cos that's what it's called, it's not really called smuggling. There's people going there everyday...they might have a transit van, they are bringing stuff back' (M16 – 66 year old male, monthly buyer)

7.4.1.2 *Brands of illicit tobacco purchased by smokers*

Smokers purchased various brands of illicit cigarettes and tobacco including: Cutters choice, Benson and Hedges, Drum, Kent, Gold leaf and Old Holborn (Appendix 7.12). However, the most commonly purchased brands were Golden Virginia (RYO tobacco) and Marlboro Reds (cigarettes). According to smokers, these brands were the most widely available in the illicit market. Although it appeared that smokers mostly purchased the brand of illicit tobacco readily available; when asked to state their reasons for buying a particular brand reasons given were around taste, price and ease of access. Smokers appeared to display no brand loyalty when purchasing illicit tobacco, stating that they would purchase whatever was available cheaply at the time of purchase. However, this was only if their preferred brand was unavailable.

7.4.1.3 *Span of illicit tobacco purchase*

Smokers' in the current study appeared to have been purchasing illicit tobacco for some time. Duration of illicit tobacco purchase ranged from a few months (3-4 months) to 20 years.

7.4.1.4 *Quantity of illicit tobacco purchased*

Smokers purchased illicit tobacco in bulk and rarely purchased a single pack of cigarettes or RYO tobacco at a time. Hence when purchasing illicit tobacco, this was sometimes bought in packs or cartons of 200 cigarettes. This was done for the sake of convenience and in order to have a ready supply of tobacco.

'Like when I buy the cigarettes before you just buy like a carton of them and you get like 200 in there, because its cheap and you're not sure if they're gonna be around all the time its best to buy a load of it' (F4 – 22 year old female, weekly buyer)

The amount of illicit tobacco purchased at a given time also depended on smokers' finances and what they could afford at the time. Smokers' cigarette consumption was also a determinant in the amount of illicit cigarettes or tobacco purchased at a given time.

7.4.1.5 *Exclusivity of illicit tobacco purchase*

Smokers in the current study reported smoking either cigarettes or RYO tobacco exclusively. There were smokers who had no preference, stating that they would smoke whatever was available at the time.

'At the moment just to try and keep the cost down I smoke hand rolled but I will buy tailor made cigarettes as well (F1 – 50 year old female, monthly buyer)

Smokers reported switching from cigarettes to RYO as a means of cutting down on their smoking or cutting down on tobacco expenditure.

'Well now I mainly just smoke hand rolled tobacco because I wanted to cut down with the smoking so...because it takes longer to roll the tobacco and like. I don't think I really like it as much as the cigarettes, I prefer the cigarettes but because I only buy the tobacco now it's better for me I think. I smoke less, so I smoke tobacco basically' (F4 – 22 year old female, weekly buyer)

Illicit tobacco was not exclusively purchased by smokers in our sample. Smokers reported purchasing legitimate tobacco or cigarettes when unable to access illicit tobacco. A few smokers indicated that they purchased legitimate tobacco or cigarettes when out socially, mainly for keeping up appearances.

'If I'm actually going out on a date I'll probably buy a packet of

cigarettes and if the woman say for instance smokes then obviously I've got...I guess it's that brand...it's like people like their Gucci bags and all that its like that...what you don't want to turn up and have a replica pack of cigarettes and they think you're cheap' (M11 – 43 year old male, weekly buyer)

When purchasing legitimate tobacco, smokers reported buying budget brands such as Mayfair and Vogues to keep costs low. Smokers also reported buying a reduced amount of cigarettes or tobacco if buying legitimate products. In contrast, one smoker preferred sticking to one brand of cheap tobacco. This was due to the belief that switching between brands had adverse effects on his health.

'It's the Gold leaf that I used to smoke so...and then I mean I couldn't find it because it was finished in the market so I bought Benson, so just changing brands like I got infection, sore throat like this so...but I stopped it was well I didn't smoke all of the packet, I just stopped it' (M5 – 33 year old male, daily buyer)

7.4.2 Sources of illicit tobacco

7.4.2.1 Sources used by smokers

The most commonly cited source of cheap illicit tobacco by smokers in the current study sample was under the counter in shops.

'Normally I go up the [...] road; just round the corner I know two or three shops' (M7 – 57 year old male, weekly or fortnightly buyer)

Smokers reported purchasing cigarettes or tobacco whilst on holiday in other countries or through friends who regularly travel abroad and bring cigarettes back to sell on. Other smokers reported buying cheap tobacco from friends but were unsure

of how the cheap cigarettes or tobacco were obtained.

'My mate phones me up, I've known him years since I lived in Camden, he lives in Kings Cross. Where he gets it from I don't know, I don't ask questions' (M14 – 53 year old male, monthly buyer)

Markets and street corners appeared to be another popular source of cheap cigarettes and tobacco. Smokers acknowledged that street sellers were easily spotted in places such as train stations, bus stops, doorways etc. and were well known in the local area. However, a few smokers indicated observing that street sellers and sellers in markets were not as visible as they use to be in the past.

'Yeah I used to go to ...there was a market that used to sell them but I haven't seen him in a while so whether he got busted or whether they've moved somewhere else I don't know' (M10 – 35 year old male, weekly buyer)

'It's got a lot more discrete now' (M6 – 47 year old male, weekly buyer)

Pubs although less commonly mentioned as an illicit source of tobacco was used by smokers who recounted purchasing cheap tobacco from sellers in their local pubs. Many smokers reported using and knowing of multiple sources of cheap tobacco. Sources used appeared to depend on the price of the cheap tobacco and the distance to the illicit source.

7.4.2.2 *Discovery of illicit tobacco sources*

In order to explore access to illicit tobacco, smokers were asked to discuss how they discovered their sources of illicit tobacco. Smokers reported spotting sellers and then going on to purchase cheap tobacco from them, whereas others recounted being approached by sellers.

'You tend to pick out people that are actually selling the stuff because they'll always look a bit like... 'is anyone looking, is anyone looking' and you tend to hone in on that. And as you walk past he obviously opens the bag and you see the cigarettes and that's when you have the discussion with him' (M11 – 43 year old male, weekly buyer)

Smokers thought it was a well known fact in the local community and social circles, where you could purchase cheap tobacco and this was spread through word of mouth.

7.4.2.3. *Ease of access to illicit tobacco sources*

Sources of cheap tobacco appeared to be easily accessible and readily available to smokers; with some sources in close proximity to smokers' homes and based in their local communities. However, smokers indicated travelling some distance to purchase cheap tobacco.

'Quite easily really but I do...when I go it's a bus ride away from where I live it's not right near my house and...quite easily' (F3 – 47 year old female, weekly buyer)

7.4.2.4 *Supply (frequency) of illicit tobacco purchase*

The rate of illicit tobacco purchase reported by smokers ranged from every day to monthly. This depended on a number of factors, one of which was smokers' finances. In addition, it depended on the availability of illicit tobacco, spotting sellers and how frequently friends and relatives travelled abroad and brought cheap tobacco back. Nonetheless, smokers appeared to always have a ready supply of cheap illicit tobacco as there were multiple sources of cheap tobacco available to them.

‘Like if you can’t get off the lady in the pub or like a friend you know that it’s gonna be at the market or...cos there are so many different sources like there’s always going to be one around’ (F4 – 22 year old female, weekly buyer)

However, smokers admitted that there had been occasions in the past when they were unable to purchase illicit tobacco and had to purchase legitimate duty-paid tobacco products. These occasions appeared to be few and far between as smokers reported that if one cheap tobacco source was ever unavailable or smokers were unable to purchase cheap tobacco from a particular source, they were able to access others. When smokers were unable to obtain cheap tobacco in the past, they reported temporarily cutting down on their smoking in order to be able to purchase legitimate tobacco products.

‘If I buy say for instance from the shop it’s gonna be dearer but I’m gonna buy less of them so I’ve tried that’ (M11 – 43 year old male, weekly buyer)

7.4.3 The illicit tobacco product

7.4.3.1 *Distinguishing between illicit tobacco products*

Smokers in the current study appeared to be well aware of the different forms of illicit tobacco and indicated a number of ways to distinguish bootleg or smuggled tobacco from counterfeit cigarettes or tobacco. According to smokers in this sample this was reportedly done through either smell or the inferior packaging of counterfeit tobacco products, sometimes including spelling errors. Another means of differentiating between counterfeit and smuggled tobacco according to smokers was the taste. Counterfeit tobacco products were described as ‘vile’, ‘putrid’ ‘disgusting’ and ‘strong’.

‘If I opened that packet and took one draw of the cigarette I would know if it was wrong’ (M17 – 55 year old male, monthly buyer)

Where illicit tobacco was sold at a very cheap price this was viewed by smokers as a dead giveaway that the tobacco products being sold were counterfeit.

7.4.3.2 Negative views on counterfeit tobacco

Smokers recounted their experiences of counterfeit tobacco use with negative connotations, describing counterfeit tobacco as bad and poor quality. Generally, smokers reported finding them not as enjoyable as legitimate tobacco products. Smokers appeared to refrain from purchasing counterfeit tobacco after having bad experiences in the past.

‘You just take a one look of it and you know oh no I can’t smoke that because it does taste different, it doesn’t taste the same and when you open the cigarette you can tell the tobacco is really dry, it’s not fine, it kinda hard and a bit chunky’ (M19 – 42 year old male, monthly buyer).

7.4.3.3 Variation in quality of tobacco by illicit source

There was the widespread view that cheap tobacco/cigarettes purchased under the counter in shops or from friends and family who travelled abroad was ‘good quality’, either bootlegged or smuggled but not counterfeit. This view coupled with the presence of tax discs on these products appeared to contribute to the belief that these cheap tobacco products were legitimate products purchased tax free from European hypermarkets.

‘But the ones under...in the shop under the counter are quite...I think they’re quite...they are not as bad as you would get from the people on the streets’ (M15 – 36 year old male, weekly buyer).

Cheap tobacco products purchased from street sellers in markets were unanimously viewed as poor quality and counterfeit. There was the perception among smokers in this sample that counterfeit tobacco products were more available now than in previous years.

7.4.3.4 *Health warnings on illicit tobacco products*

Smokers had mixed accounts of the presence of health warnings on cigarette or tobacco packs purchased from illicit sources. A majority indicated that packs had health warnings but these were usually in foreign languages like Polish, German, Arabic or Spanish. Smokers recounted seeing graphic health warnings on cheap packs of cigarettes or tobacco purchased, whereas others did not.

‘Well they usually just have the writing ones and sometimes they have the sort of like pictures but I can’t remember. Usually it’s just written in another language, the warning but I don’t really know what language it would be’ (F4 – 31 year old female, fortnightly/monthly buyer)

7.4.4 Price of illicit tobacco

7.4.4.1 *Prices reportedly paid for illicit tobacco products*

Smokers reported paying considerably less for tobacco products purchased from illicit sources compared with legitimate sources. Smokers who purchased cigarettes in cartons reported paying between £25 and £30 for 200 cigarettes. Smokers reported the price of an illicit pack of 20 cigarettes ranging from £3 (B&H, Marlboro) to £4.50 (John Player Gold leaf) depending on the brand of cigarettes; with some counterfeit cigarettes packs reportedly sold for as little as £1.50. Similarly, the prices reported for a 50g pouch of illicit RYO varied according to brand and ranged from £4.50 (Golden Virginia) to £9 (Old Holborn). This varies significantly from the price

of legitimate tobacco sold in supermarkets: £7.66 (B&H), £7.62 (Marlboro), £15.78 (50g Golden Virginia) and £15.91 (Old Holborn) (price quotes from www.mysupermarket.co.uk, 2011). Source of purchase appeared to factor in the reported price paid for cigarettes and RYO as some smokers quoted varying prices for the same brands.

Although smokers reported paying much less for cigarettes and tobacco purchased from illicit sources compared to legitimate sources, smokers were concerned that the price of illicit tobacco was on the rise.

‘Nowadays it’s £4.50 but it was ...a month before it was four quid...that’s what I asked them, that are you guys paying for tax for these cigarettes why are you increasing it? They said the other people who sell to us they are increasing it so that’s why we are increasing this price, so I said ok’
(M5 – 33 year old male, daily buyer)

7.4.4.2 Price as justification for illicit tobacco purchase

Unsurprisingly price was indicated as the reason for smokers’ decision to purchase illicit tobacco as they viewed it as a bargain to be taken advantage of.

‘The price. You’re gonna buy it at half price ain’t you. You’ll buy anything at half price wouldn’t you if somebody says look that’s half price. And you’re getting it regular’ (M9 – 42 year old male, monthly buyer)

Purchase of illicit tobacco also appeared to be a response to legitimate tobacco price increases. Smokers concluded that the availability of cheap tobacco was the only way they could afford to purchase tobacco and again viewed it as a bargain.

‘Well I can’t afford to buy the ones in the shop...it’s better for your

budget to buy it cheap’ (M9 – 42 year old male, monthly buyer)

7.4.4.3 *Beliefs on why illicit tobacco is cheap*

Smokers supposed that the illicit tobacco they purchased was much cheaper than legitimate tobacco because the tax was not paid on these products. In addition, it was supposed that it could be cheaper because the tobacco and cigarettes were stolen and resold at a cheaper price. A few smokers indicated that the cheap tobacco and cigarettes they purchase were cheap because they were bought in bulk from abroad or that they were smuggled into the country and resold cheaply.

‘I assume they’ve actually gone you know on a ferry...gone across to France to a hypermarket and stoked up on a load of tobacco and that’s not an illegal thing in itself but what they are doing obviously is selling it and that part of it is illegal’ (F1 – 50 year old female, monthly buyer)

7.4.4.4 *Negative views on tobacco taxation*

Since smokers’ main justification for illicit tobacco purchase was price, they were asked to express their views on tobacco taxation in the UK. This was met with some hostility and a lot of criticism with the general belief being that they were targeted by the tobacco tax increases. A few smokers in this study did not accept that high tobacco taxation encouraged quitting and insisted that the government did not want smokers to quit but rather wanted to receive the revenue from tobacco sales.

‘Yeah it annoys me why we pay so much tax, they think that people are going to stop smoking; they know people are not going to stop smoking so they take advantage of it’ (F2 – 38 year old female, monthly buyer)

In general, when discussing tobacco taxation smokers expressed anti-government sentiments. There was the perceived view of the government being self-serving with no care for the general population.

7.4.5 Illicit tobacco traders

7.4.5.1 *Perceptions of illicit tobacco traders*

In general, sellers were viewed quite positively by smokers in this sample. They were seen as providing a service and heaven sent.

‘They are sent from heaven. Why am I going to pay £13 when I can pay £7?’ (M17 – 55 year old male, monthly buyer)

Illicit tobacco traders were also described as friendly as it appeared that there was a level of trust built between sellers and buyers. A further perception of illicit sellers was of individuals trying to make a living by responding to the demand for cheap tobacco and making a significant profit from illicit tobacco sales.

‘Don’t get me wrong they are earning a living I mean they’ve gotta do...they’ve gotta earn a living, a lot of them have got children so they’ve gotta be fed’ (M14 – 53 year old male, monthly buyer)

Although the general view of illicit sellers was positive, market street sellers were perceived as dubious and untrustworthy. Smokers revealed that they had been scammed in the past by street sellers. One particular smoker recounted an incident where he purchased RYO tobacco packs that he later discovered were filled with tissues and powder but no tobacco.

7.4.5.2 *Traders’ sales techniques*

In order to make their sales, smokers reported being approached by illicit tobacco sellers on the street and offered cheap tobacco products.

It’s like they see you smoking and they walk up to you and like open the bag and say ‘look I’ve got some cigarettes here and they are cheaper than what you’ll buy in the shop and that’s it’ (M12 – 47 year old male,

daily/weekly/monthly)

Sales of illicit tobacco in shops only appeared to take place after sellers got to know customers and built a level of trust with them. This suggests that sellers in shops were well aware of the illegality of these sales and were cautious of getting caught out.

‘Yeah I know people...I know shops that other people I know have got em off the shops but I mean they’re not gonna sell em to everyone that walks into the shop and wants them under the counter. I think if you’re a local in the area and you’re in the shops all the time and they know your face so then yeah they’d...I’ll buy em. But I could walk in like say up the road and say have you got any cheap tobacco and he’s gonna go who are you?’ (M15 – 36 year old male, weekly buyer)

In addition, illicit tobacco traders in shops were described as edgy, glancing around before making a sale and sometimes requiring a signal which involved tapping on the counter or using a slang term for cheap tobacco.

‘There are several local shops and you just go in and bang on the counter and if you don’t...even like I’ve been to shops where someone’s told me they have them and the shop keeper doesn’t know me so I’ll just sort of go ‘can I have a packet of Marlboro lights’ bang the counter, so there’s the sign’ (F5 – 47 year old female, daily buyer)

Some illicit tobacco sellers appeared to encourage purchase of larger amounts of cheap tobacco by offering a discount when buyers bought in bulk.

7.4.6 Views on the impact of illicit tobacco trade

7.4.6.1 *Impact on smoking behaviour*

Smokers indicated that the availability of cheap illicit tobacco sustained their smoking behaviour.

‘I think I smoke as much as I want to because I can get it so cheap like I said (M18 – 35 year old male, monthly buyer)

There were smokers who reported purchase of illicit tobacco having no effect on their smoking, indicating that they did not smoke more or less and largely stuck to their daily cigarette consumption. Interestingly, one smoker reported using illicit tobacco as a means of cutting down, believing that the poor taste discouraged increased consumption.

‘No its not, no its because I wanted to cut down at the same time then I started buying cheap stuff because not only do roll-ups cut me down, it’s also the cheap stuff. Because like I said you get a scratchy throat and you cough this really dry cough and after the tenth cigarette you say no’ (M1 – 46 year old male, weekly buyer)

7.4.6.2 *Impact on the local community*

Smokers maintained that the sale of illicit tobacco was beneficial to the community as it provided cheap affordable tobacco, especially to those in deprived communities.

‘Well I think cheap tobacco has made more benefit to the community than the Police and the gangsters. They are doing somebody a favour; they are actually saving people money’ (M9 – 57 year old male, weekly buyer)

Smokers acknowledged that the sale of illicit tobacco encouraged criminality in the community. Whereas others dismissed this claim insisting that there were more serious criminal activities taking place in the community other than the sale of illicit

tobacco. There were some smokers who thought illicit tobacco trade had no negative impact whatsoever on the community. This belief appeared to stem from the fact that smokers viewed purchase of illicit tobacco as the norm in their communities, sometimes likening its sale to the purchase of pirate DVDs or downloading music illegally.

‘No...I kind of like view it the same as you get people going round going ‘DVD,’ do you know what I mean? In fact I’ve seen people doing both, selling DVDs and cheap tobacco so...’ (M4 – 49 year old male, monthly buyer)

7.4.6.3 Impact on health

Smokers appeared to have some concern over the health impact of illicit tobacco purchased from street sellers, believing that these were counterfeit and therefore relatively more harmful than legitimately manufactured tobacco. However, some illicit tobacco products purchased from street sellers were deemed ‘safe’ and this perception depended on the look of the seller and the packaging of the product. In spite of this concern smokers still indicated that they would continue purchasing illicit tobacco and justified this by reiterating that these products were obtained at a much cheaper price.

‘You don’t really think of the consequences, you think to yourself ok fine if its got tobacco in it obviously the nicotine and it takes away your craving then that’s all that matters really’ (M11 – 43 year old male, weekly buyer)

Concern over the negative health impact of illicit tobacco appeared not to factor in smokers decision to purchase cigarettes or tobacco under the counter in shops as these were perceived to be legitimate duty free products. Nonetheless, smokers were under no illusion that legitimately manufactured tobacco products were much better

and acknowledged that all cigarettes were harmful. Counterfeit tobacco products were perceived to have a much more negative health effect than legitimately manufactured tobacco products, with smokers indicating that when smoked in the past counterfeit tobacco products had an adverse effect on their health.

‘But you smoke it and after a couple of days it gets very chesty on you, you know and its all of a sudden you do feel like...its not necessary straight away that you smoke the cigarette that it tastes wrong but after 2 or 3 days of smoking I can feel it like it gets really chesty and I’m coughing up a lot more’ (M6 – 47 year old male, weekly buyer)

7.4.7 Moral stance on illicit tobacco trade

7.4.7.1 Views on the illegality of illicit tobacco trade

Generally smokers appeared unperturbed by the illegality or morality of the illicit tobacco trade, even though there was the awareness that this activity was illegal. Smokers were not bothered by it, believing that there was nothing wrong with this trade and even viewed it as harmless.

‘At the end of the day its not my problem, when it starts affecting me personally then I’ll start thinking about it but when its not affecting me personally I don’t care’ (M15 – 36 year old male, weekly buyer)

Others merely decided not to invest too much thought into it and appeared closed off to the illegality of this illicit activity. However, other smokers appeared to be affected by the illegality of purchasing illicit tobacco, seeing it as worrying, embarrassing and uncomfortable.

‘Even when I go I’ve been going for such a long time I still kind of keep glancing round and you know it’s not something I’m really comfortable with but then when I come away I’ve got you know I have got them cheaper’ (F3 – 47 year old female, weekly buyer)

7.4.7.2 Views on illicit tobacco trade's connection to organised crime and terrorism

In order to test some messages used to deter illicit tobacco purchase, smokers in this sample were asked to consider the statement that the illicit tobacco trade could be funding terrorism and was connected to organised crime. Smokers supposed this to be true. There were other smokers who thought this true only for the sale of counterfeit and not bootlegged or smuggled tobacco.

'Right the duty free stuff I don't think is part of organised crime, I just think that somebody's trying to make a few quid here and there there's nothing organised about it. But all this fake stuff absolutely that's part of organised crime' (M13 – 35 year old male, weekly buyer)

A few smokers regarded this statement with some scepticism and believed it to be a ploy by the government. Whereas, another group of smokers appeared not to be bothered by this link to organised crime or terrorism and did not give it much thought.

7.4.7.3 Views on the sale of illicit tobacco to under-aged smokers

When confronted with the statement that sale of illicit tobacco encouraged youth smoking, a minority of smokers acknowledged this was unacceptable and others found this hard to believe. A few smokers supposed that young smokers would get their tobacco one way or another and not just through the illicit tobacco market.

'You know those underage smokers, ultimately they get older friends or older siblings who go out and buy the tobacco or the cigarettes for them in shops or they steal them from their parents as simple as that. So they are gonna get it one way or the other if they really want to you know... So

it's not that much different really to approaching somebody who's selling... cheap cigarettes' (F1 – 50 year old female, monthly buyer)

7.4.8 Tackling illicit tobacco trade

7.4.8.1 Discouraging illicit tobacco purchase

In order to determine how to tackle demand for illicit tobacco, smokers were asked to discuss what would prevent them from its purchase. One scenario given was if the price of legitimate tobacco was brought down. Other views on preventing illicit tobacco purchase in this sample included: if the cheap tobacco purchased tasted horrible, quitting smoking, a complete ban on smoking, earning more money or if sale of illicit tobacco was linked to drug dealing.

'If they tasted horrible, if they tasted horrible then I would be like no they don't taste the same then I wouldn't, other than that it wouldn't stop me'
(F2 – 38 year old female, monthly buyer)

The importance of sustained enforcement work in tackling the illicit tobacco trade was highlighted with smokers indicating that removing illicit sellers would prevent them from purchasing cheap tobacco. Some smokers thought a 'Draconian' type enforcement for being caught with illicit tobacco would also prevent purchase.

'Only if there weren't there, if they weren't there then obviously I can't do it' (M11 – 43 year old male, weekly buyer)

It was evident that illicit tobacco use was embedded in certain smokers' tobacco purchasing behaviour as they saw no feasible reason for not purchasing cheap tobacco. Nonetheless smokers reported that if unable to access cheap tobacco they would resort to purchasing legitimate tobacco products; with some indicating they would purchase budget brands as these are cheapest. Other smokers reported that absence of cheap tobacco would cause them to cut down on their smoking due to

budget constraints.

‘If there was no cheap tobacco right, then I would buy something in the region of 25g (instead of 50g) which is a different packet’ (M16 – 66 year old male, monthly buyer)

There were smokers who reported that they would be driven to quit or think about quitting if they were unable to purchase illicit tobacco. There were seemingly highly tobacco dependent smokers who reported that if unable to purchase illicit tobacco would scrimp and cut back on other expenses so as to afford legitimate tobacco. Smokers reported that they would resort to travelling abroad to countries with low tobacco tax to purchase tobacco or cigarettes at a cheaper price.

7.4.8.2 Possibility of eliminating illicit tobacco trade

There was a widespread belief that it would be impossible to eradicate the illicit tobacco trade because there was a demand for cheap tobacco and a lot of profit to be made by those who sold illicit tobacco products.

‘It’ll never happen that there won’t be any more cheap tobacco, there’ll always be cheap tobacco. You’ll never get rid of it’ (M17 – 55 year old male, monthly buyer)

Whereas others thought enforcement efforts were best spent on curbing drug trafficking which was viewed as more criminal. Nevertheless, a few smokers indicated that they would support the tackling of the illicit tobacco trade.

‘Yeah I would support it cos it’s not really a good thing in the long run. Like in the short term yeah its cheaper you can get it like but in the long term not really because its keeping a lot of people still smoking’ (F4 – 22 year old female, weekly buyer)

7.5 Discussion

This study, using an interview methodology gained some useful insights into smokers' current purchasing behaviour, views and beliefs on various aspects of their illicit tobacco use and attitudes towards tackling illicit tobacco trade. The most frequently purchased illicit tobacco brands were Marlboro, Benson and Hedges cigarettes and Golden Virginia and Old Holborn RYO tobacco. Smokers were able to access illicit tobacco/cigarettes through multiple sources including: 'under the counter' in shops, sellers in pubs, friends and family travelling abroad, markets, street corners and bus stops. Discovery of illicit sources appeared to be either through word of mouth, being approached by sellers or spotting sellers. Illicit tobacco sources were easily accessible and based in smokers' local communities and they appeared to have a ready supply. Smokers were able to distinguish counterfeit tobacco products from other cheap tobacco products through the inferior packaging, taste and tell tale low price. Smokers viewed counterfeit tobacco products negatively and found them not as enjoyable and more harmful to their health compared to legitimately manufactured tobacco. These products were mostly perceived to be sold by street and market sellers. Illicit tobacco use appeared to be a normal occurrence in this sample of smokers with the main motivation for purchase being price, although there was concern expressed over the increasing price of illicit tobacco. Illicit tobacco traders were viewed favourably as trying to create an income for themselves as well as providing a welcome service. Illicit tobacco sellers in shops were described as edgy, glancing around before making a sale and sometimes requiring a signal which involved tapping on the counter or using a slang term for cheap tobacco. In addition, market/street sellers were perceived as dubious and untrustworthy. Smokers presented a number of factors that would prevent illicit tobacco purchase such as: if illicit tobacco was not available, quitting smoking, if the price of legitimate tobacco products were reduced, if illicit tobacco purchased was unpleasant, quitting smoking, a complete ban on smoking, earning more money and

sales of illicit tobacco were connected to drug dealing. However, smokers either did not believe the illicit tobacco trade was connected to organised criminality and terrorism or were not bothered by it. Moreover, most smokers appeared untroubled by the illegality of illicit tobacco and instead blamed the government for making tobacco taxes so high. Of great significance was the finding that being unable to purchase illicit tobacco would drive smokers to quit or cut down on their smoking. However, smokers admitted that they would continue to buy legitimate tobacco, even if it meant cutting back on other expenses in order to afford it. There was the widespread belief that it would be impossible to completely eradicate illicit tobacco trade.

Generally, smokers in our sample viewed the purchase of illicit tobacco as the norm, likening this activity to the sale of pirate DVDs or illegal music downloads which are activities regarded as acceptable and entirely normal (Balestrino, 2008; Rutter and Bryce, 2008; Casola et al., 2009). This finding has important policy implications, because in order to tackle demand for illicit tobacco this belief that buying illicitly is acceptable and a normal practice needs to be addressed.

The most prevalent source of illicit tobacco reported in the current study was ‘under the counter’ in shops. This is a new finding compared to that of previous studies which reported purchase of illicit tobacco occurring mostly through friends and trusted sources of illicit tobacco in the community (see Chapter 6, NEMS, 2009). This could possibly be due to enforcement activities such as, HMRC’s strengthened enforcement to disrupt supplies at import and key distribution points, increased number of seizures and effective penalties to those caught selling illicit tobacco, all of which could have resulted in changes in sources of illicit tobacco. This adds new insight into the changing and evolving nature of the illicit tobacco market and highlights how the illicit market responds to control policies. Moreover, this new

insight emphasises the need for continuous monitoring of the illicit tobacco market as recommended by the WHO FCTC. This will enable changes in the illicit tobacco market to be picked up promptly and addressed; in this case, this new prominent source of illicit tobacco – ‘under the counter’ in shops warrants urgent attention and effective enforcement activities as well as further research to assess whether this is a nation-wide activity, given that our sample was drawn from London. Smokers in this study reported easy access and supply of illicit tobacco, indicating that the opportunity for high taxes to drive these smokers to quit is lost when they can easily obtain tobacco at a cheaper price. This has important implications for smoking cessation as these smokers maybe less likely then to engage in cessation interventions.

The most frequently purchased illicit tobacco brands were brands popular to the UK market such as Marlboro, Benson and Hedges cigarettes and Golden Virginia and Old Holborn hand rolled tobacco. This finding suggests that although seizures of cheap ‘illicit’ white brands have recently increased in the UK, the smuggling of genuine UK brands is still an issue. Limited health warnings written in foreign languages on cigarettes and tobacco purchased from illicit sources suggest most of them were smuggled or bootlegged from Europe and Arab countries. In some cases, these cigarettes and tobacco had duty tax stamps on them prompting smokers in this sample to suppose that these tobacco products were not counterfeit but rather that they were legitimate ‘duty-paid’ products (and therefore of good quality) smuggled into the country and resold cheaply. Therefore, anti-illicit tobacco campaigns focused on warning smokers about the adverse health effects of counterfeit tobacco may not have an impact since they consider their purchases to be of legitimate products. In addition, such campaigns may contribute to beliefs that legitimate tobacco products although hazardous are not as detrimental as counterfeit products.

Smokers reported price as the main motivation for their illicit tobacco purchase. They viewed purchase of illicit tobacco as acquiring their cigarettes and tobacco at an affordable and bargain price. This finding corresponds with that of a previous study conducted in the UK which found that the main motivation for illicit purchase was to reduce the financial burden of smoking (Wiltshire et al., 2001). In addition, there was the sense of purchasing illicit tobacco as a means of ‘getting one over’ on the government for putting such high taxes on tobacco products. Smokers maintained that they were unfairly targeted and punished by high taxes on tobacco products. Almost all smokers in this study had general anti-government views, perceiving the governments as criminals only interested in making profits from heavy taxes levied on tobacco. The fact that historically, HMRC and trading standards had been the main agencies tackling illicit tobacco trade may have contributed to this sentiment. This suggests that trying to deter illicit tobacco purchase by highlighting high revenue losses due to the illicit tobacco trade will have little impact on these smokers’ purchasing behaviour unless effectively executed. Multi-agency partnerships including health professionals such as that implemented in the North of England may have more of an impact on changing smokers’ purchasing behaviour. This study was conducted at a time of economic recession and it has been reported that illicit markets may flourish in times of economic hardship (Arkes, 2011). This was evident in this study with smokers indicating that they started making illicit tobacco purchases after becoming unemployed and unable to afford ‘duty-paid’ tobacco products. However, many smokers in this sample were not necessarily influenced by the recession as they reported purchasing illicit tobacco prior to the recession.

Like Wiltshire and colleagues (2001) this study found that smokers regarded illicit tobacco sellers positively seeing them as providing a service and trying to make a living. This finding also corresponds with that of other studies which established that

there was support for those involved in the illicit tobacco trade, with illicit tobacco sellers sometimes found to be trusted and respected within their communities (Hornsby and Hobbs, 2007; Shelley et al., 2007; Straus and McEwen, 2009). However, in this study some illicit sellers (particularly those known to sell tobacco products that were assumed to be counterfeit) were viewed as dubious and dishonest. This perception was usually down to past experiences of smokers buying tobacco products from these vendors that they felt were poor quality. This, in addition to enhanced enforcement efforts, for example, increased seizures and severe penalties for those caught selling illicit tobacco, could have resulted in street sellers being less prevalent as they used to be. In addition, this contributes to the finding that smokers in this sample did not purchase counterfeit tobacco.

Another important finding that may have serious implications for tobacco control efforts was the report that loss of access to illicit tobacco could drive many smokers to think about quitting or cutting down on their smoking. This is significant and again highlights the fact that users of illicit tobacco are mainly driven by price. It also suggests that these smokers were not opportunistic illicit tobacco purchasers but rather exclusive users that rely on cheap tobacco to maintain their smoking. This finding is in line with that of a survey conducted in the North of England that access to illicit tobacco enabled smokers to continue smoking when they would otherwise be unable to afford to do so (NEMS, 2009). Furthermore, when smokers in the current study were asked to discuss what would prevent them from purchasing illicit tobacco, smokers reported the absence of illicit sellers. This reinforces the need for continuous enforcement work to not only curb the supply of illicit tobacco but also introduce severe penalties to discourage sellers. Nonetheless, it is important to highlight here that although smokers declared that they would change their smoking behaviour in response to loss of access to cheap tobacco, that in reality this may not be the case, especially if they are highly tobacco dependent.

Another significant finding from the current study was that many smokers were untroubled by the illegality or morality of purchasing illicit tobacco. Smokers were generally nonchalant about being seen as partaking in or encouraging an illegal activity in their community when buying cheap tobacco from illicit sources. This could be because purchase of illicit tobacco is not viewed by smokers as a criminal activity as there are no penalties attached to its purchase. In fact, smokers judged that there were more serious crimes taking place in their communities that should be of concern the government such as the sale of class A drugs. In light of this, when confronted with the claim that the illicit tobacco trade was connected to organised crime and had links to terrorism rings, unsurprisingly this was received with some cynicism and a relaxed attitude by smokers. This finding is important when thinking of developing effective policies to tackle the demand for illicit tobacco, as this shows that efforts to appeal to smokers' morality are bound to have little or no effect.

Although tobacco companies argue that counterfeit products are on the rise and thriving in the illicit market more than legitimately smuggled or bootlegged products, findings from this study suggest this is not the case. Many smokers in this sample described their experiences of counterfeit tobacco with negative connotations. They depicted counterfeit tobacco products as 'unsmokable' and stated that they would not purchase these products. There is some evidence that counterfeit tobacco products contain more harmful chemicals and substances than legitimately manufactured products (see Chapter 2, section 2.4.1). Consequently, it was no surprise that smokers' expressed some concerns over the contents and health impact of counterfeit tobacco. Nonetheless, smokers were able to purchase smuggled or bootlegged legitimate products.

As with all qualitative research, findings from this study cannot be generalised as it

only describes smokers' reports on their purchasing behaviour. In addition, this sample of participants was not representative of smokers in the population as it was based on a sample drawn from London; rather the aim was to recruit a group of smokers who reported regular purchase of illicit tobacco to explore their views and beliefs on illicit tobacco trade. Nonetheless, this study builds on previous studies and adds some new insights on the beliefs and views of smokers who regularly purchase illicit tobacco. In addition, findings from this study informed the development of new illicit tobacco questions to be asked of smokers in a national smoking survey.

7.6 Conclusion

The current study provided an increased understanding of the beliefs and views of those who purchase illicit tobacco which may contribute to the development of effective policies and campaigns aimed at reducing demand for illicit tobacco in England. Smokers appeared to be able to access illicit tobacco and cigarettes through multiple sources based in smokers' local communities, however 'under the counter' in shops emerged as a prominent source. The main justification for illicit tobacco purchase was the cheap price of it. Illicit tobacco traders were perceived as providing a service, although some were seen as dishonest. Smokers appeared not to purchase counterfeit tobacco products due to its perceived poor quality. Of great significance was the finding that being unable to purchase illicit tobacco would drive smokers to quit or cut down on their smoking. Most smokers related absence of illicit tobacco as the cause that would prevent illicit tobacco purchase. Although, this encourages continuous enforcement efforts to curb supply, it still remains that the best approach to tackling the illicit tobacco trade may be to assist smokers to quit, thereby removing demand.

CHAPTER 8

FOLLOW-UP ESTIMATION OF ILLICIT TOBACCO USE IN ENGLAND A NATIONAL SURVEY OF ENGLISH SMOKERS IN 2012

8.1 Introduction

The nature and extent of the illicit tobacco trade has changed in the last two decades. In the 1990s and the early 2000s, the main type of illicit trade was large-scale cigarette smuggling with the tobacco industry intimately involved (Joossens and Raw, 2012). In Europe the large-scale smuggling of well-known brands has subsequently decreased as a result of a number of strategies: including civil actions against the tobacco industry (Joossens and Raw, 2012), European Union agreements with the tobacco industry, memoranda of understanding agreements between governments and the tobacco industry and anti-smuggling measures including fiscal marks on packs and container detection (Joossens and Raw, 2008). In its place other types of illicit trade have emerged, such as illicit manufacturing including counterfeiting and the development of new cigarette brands. (Joossens and Raw, 2012).

In the UK this change is evident as the proportion of illicit genuine UK brands decreased from almost a third of all seizures in 2002-3 to 6% in 2009-10 (Her Majesty's Revenue and Customs (HMRC), 2011a). This implies that the illicit tobacco trade has developed other forms of illicit tobacco (counterfeit and cheap whites) in response to restrictions on smuggling. An important strategy in tackling the illicit tobacco market is the monitoring of all aspects of the trade, ensuring that changes in the market are rapidly uncovered and counteracted. Additionally, this will aid in the evaluation of the effectiveness of policies to tackle the illicit tobacco trade.

Therefore there is need for more independent monitoring of the illicit trade on a regular basis using a clearly defined methodology (Joossens et al., 2012) to capture any changes in the illicit tobacco trade. Moreover, conducting several comparable surveys at different points in time can provide useful information about whether the illicit tobacco market share is increasing or decreasing over time.

In relation to monitoring the illicit tobacco market, findings from the qualitative study on the attitudes and purchasing behaviours of illicit tobacco users drawn from the London area (Chapter 7) indicated purchases from ‘under the counter’ in newsagents and off licences as a popular source of illicit tobacco for smokers. This realisation led to the decision to explore this finding in a national survey of smokers. This was a focus of the current study, in addition to outlining the trend in illicit tobacco use in England between the various time points of data collection. If smokers are able to access illicit tobacco in a legal setting such as a retail shop, it is possible that this purchasing behaviour is normalised and becomes acceptable. Also of interest was whether the emergence of this source of illicit tobacco had any impact on the prevalence of illicit tobacco use, the number of illicit sources used and the associated characteristics with its use. The proportion of illicit tobacco that made up smokers’ total tobacco consumption and beliefs on the provenance of cheap tobacco could have also undergone changes since the previous survey study. However, due to budget constraints these questions were not included in the follow-up survey reported in this chapter. There was also the possibility that certain tobacco control initiatives such as the ban on Point of Sale (POS) displays in large retailers which came into effect in England in April 2012 (UK Parliament, 2010) implemented during the period of the current study may have impacted on smokers’ purchasing behaviour.

8.2 Study aims

This study aimed to investigate the trend in prevalence of illicit tobacco use in England, by conducting a follow-up survey in 2012. In addition, it sought to explore ‘under the counter’ purchases in newsagents and off licences as a source of illicit tobacco in a nationally representative study. Of interest also was whether there have been any changes in the characteristics of those who report illicit tobacco purchase.

The study’s objectives were as follows:

1. Estimate the prevalence of illicit tobacco use in England in 2012 with the addition of ‘under the counter’ in newsagents and off licences as a source of illicit tobacco.
2. Estimate the number of illicit sources reportedly used by smokers’ in 2012 with reports in 2007-8 and 2010-11.
3. Determine whether there were any changes in the associated characteristics of smokers who reported illicit tobacco use in 2012 compared to 2007-8 and 2010-11.

8.3 Methods

8.3.1 Study design and sampling

In May 2012, additional funding was granted by Cancer Research UK to keep the illicit tobacco questions in the Smoking Toolkit Study (STS) for an unspecified period of time. Data for this study were collected from May to December 2012. As in the previous survey, participants were drawn from aggregated output areas (containing 300 households). These areas were stratified by ACORN (A Classification of Residential Neighbourhoods) characteristics (an established geo-demographic analysis of the population (<http://www.caci.co.uk/acorn/acornmap.asp>)) and region, and the randomly selected

to be included in an interviewer's list. This approach to profiling ensures an appropriate mix of areas by socio-economic group.

8.3.2 Measures

As in the previous survey waves smoking status was accessed by asking participants by asking: 'Which of the following best applies to you? – I smoke cigarettes (including hand-rolled) every day; I smoke cigarettes (including hand-rolled), but not every day; I do not smoke cigarettes at all, but I do smoke tobacco of some kind (for example:- pipe or cigar); I have stopped smoking completely in the last year; I stopped smoking completely more than a year ago; I have never been a smoker (i.e. smoked for a year or more); Don't Know. Those who reported smoking cigarettes (including hand-rolled) every day or smoked but not every day were categorised as current smokers and included in the current study.

Smoking and demographic characteristics including gender, age and socio-economic status were collected. Social status was categorised as previously as follows: AB = higher and intermediate professional/managerial, C1 = supervisory, clerical, junior managerial administrative/ professional, C2 = skilled manual workers, D = semi-skilled and unskilled manual workers and E = on state benefit, unemployed, lowest grade workers. The Heaviness of Smoking Index (HSI) combining scores on cigarette consumption per day and time to first cigarette of the day was used as a measure of tobacco dependence (Kozlowski et al., 1994).

Illicit tobacco purchase as in the previous survey was assessed by asking participants: 'In the last 6 months, have you bought any cigarettes or hand rolled tobacco from any of the following? - newsagent\off license\corner-shop, petrol garage shop, supermarket, cash and carry, internet, pub (behind the bar), pub

(vending machine), pub (somebody who comes round selling cigarettes cheap), people who sell cheap cigarettes on the street, people in the local area who are a ready supply of cheap cigarettes, buy them cheap from friends, buy them from abroad and bring them back with me, other, have not bought any in the last 6 months and don't know. Participants who reported purchasing tobacco from individuals that sell cheap cigarettes in the pubs, those that sell cheap cigarettes on the street, persons that are trusted sources of cheap cigarettes in the local area and buying cheap cigarettes from friends were classified as purchasing illicit tobacco. In this follow-up study, 'newsagent\off licence\corner-shop - under the counter' was added as a category of tobacco purchase in the STS questionnaire (Appendix 8.1). This source was classified as illicit as indicated by findings in the qualitative study (Chapter 7). It is important to note that due to the addition of this new category in the follow-up survey, it is not possible to make direct comparisons between the follow-up survey and the surveys conducted in 2007-8 and 2010-11. Participants' purchasing behaviours were classified into 3 groups (duty-paid (DP) only, DP and illicit tobacco and illicit tobacco only).

8.3.3 Statistical analysis

Data were analysed using SPSS 21.0. Prevalence data were analysed using descriptive statistics. Prevalence data estimates were weighted using the rim (marginal) weighting technique, based on the 2001 census (for gender, working status, prevalence of children in the household, age, social status and region) and the process repeated until all variables match the specified targets (Fidler et al., 2011). In order to determine whether the exclusion of 'under the counter' purchases in newsagents\off-licences\corner-shops had any effect on our estimation of illicit tobacco use in 2010-11, we extrapolated the estimates of 'under the counter' purchases in shops to 2010-11. This was achieved by adding the number of reports

of illicit tobacco use at the same level as in 2012 to the 2010-11 survey data. Additionally, reports of ‘under the counter’ purchases were excluded in 2012 in order to determine what effect this would have on the estimation of illicit tobacco use at this time point.

The assumption of ‘normality’ required for ANOVA analysis was assessed using the Kolmogorov-Smirnov (K-S) statistic. Cigarette consumption was found to be statistically non – normal among those reporting purchases from DP sources only, illicit sources only and DP and illicit sources. Kruskal-Wallis tests were therefore adopted to assess differences in cigarette consumption. Differences in prevalence of illicit tobacco use as a function of time (2007-8, 2010-11 and 2012) were assessed using Kruskal-Wallis tests. Chi-squared analysis was used to test group differences for categorical variables. Forced entry logistic regression was used to assess associations between socio-demographic variables, smoking characteristics and illicit tobacco purchase. Statistical significance was set at $p < 0.05$.

8.3.4 Ethical approval

Ethical approval was granted by the University College London Research Ethics Committee.

8.4 Results

A total of 14,229 participants were surveyed between May 2012 and December 2012 of which 3,219 (22.6%) were current smokers. Current smokers who responded ‘none’, ‘don’t know’ or other answers (these were either repetitions of answers already given or were not legible) to the question on source of tobacco purchase were excluded from the current study ($n = 59$). Table 8.1 shows the socio-

demographic and smoking characteristics of participants split according to source of tobacco purchases in 2007-8, 2010-11 and 2012.

8.4.1 Prevalence of illicit tobacco use

Between May and December 2012, 17.2% (n=497; 95%Confidence Interval (CI) 15.8 – 18.6) of current smokers reported any illicit tobacco purchase. This was 19.7% in 2007-8 and 4% in 2010-11 ($\chi^2 = 288.87$ (*df* 2), $p < 0.001$). Exclusive illicit tobacco purchase was 6.2% (CI 5.3 – 7.1) in 2012; 3.7% in 2007-8 and 1.6% in 2010-11 ($\chi^2 = 294.41$ (*df* 2), $p < 0.001$); extrapolation of purchases ‘under the counter’ in shops to 2010-11 at the same level as 2012, gave an estimated prevalence of illicit tobacco use of 15.4 % (CI 14.1 – 16.7) in 2010-11. However, excluding ‘under the counter’ purchases in our estimation of illicit tobacco use in 2012, estimated illicit tobacco use at 6.9% (95%CI 6.0 – 7.8) in 2012.

In this study, exclusive illicit tobacco purchase appeared to be slightly more prevalent in smokers from lower socio-economic groups, however this difference was not statistically different ($\chi^2 = 13.396$ (*df* (degrees of freedom) 8), $p = 0.099$). This is unlike in 2007-8 and 2010-11 where smokers from lower socio-economic groups were significantly more likely to report exclusive illicit tobacco purchase (2007-8: $\chi^2 = 33.649$ (*df* 8), $p < 0.001$; 2010-11: $\chi^2 = 23.604$ (*df* 8), $p = 0.003$). Similar to the surveys conducted in 2007-8 and 2010-11 more males (63.5%, n = 113) than females (36.5%, n = 65) reported exclusive illicit tobacco use in the current study ($\chi^2 = 16.531$ (*df* 1), $p < 0.001$). Also, as in previous surveys, most smokers who reported purchasing illicit tobacco exclusively were exclusive RYO smokers (55.5%, n = 81) ($\chi^2 = 36.124$ (*df* 4), $p < 0.001$). In addition, exclusive illicit tobacco users smoked on average more cigarettes per day (12.6 (8.57) compared with exclusive duty-paid tobacco users (11.9 (8.3) (F (*df*2, 2800) = 4.523, $p = 0.011$). Similar to previous

surveys older smokers (35 – 65+) were more likely to report exclusive illicit tobacco purchase in this study ($\chi^2 = 33.083$ ($df10$), $p < 0.001$).

Table 8.1: Socio-demographic and smoking characteristics as a function of type of tobacco and cigarette purchase in England in 2007-8, 2010-11 and 2012

Note: The survey data presented above by year are not directly comparable due to the addition of a new category

	2007-8				2010-11				2012			
	Total (n=1470)	Illicit tobacco only (n=55)	DP tobacco only (n=1180)	DP and illicit (n=235)	Total (n=2424)	Illicit tobacco only (n=40)	DP tobacco only (n=2326)	DP and illicit (n=58)	Total (n=2882)	Illicit tobacco only (n=178)	DP tobacco only (n=2385)	DP and illicit (n=319)
Age, (years) % (n)												
16-24	21.2(311)	10.9(6)	19.5(230)	32.1(75)	19.4(470)	10.9(4)	19.1(444)	37.9(22)	17.6 (506)	15.7(28)	17.2(410)	21.3(68)
25-34	18.4(271)	14.5(8)	18.6(219)	18.8(44)	20.4(495)	15.0(6)	20.7(481)	13.8(8)	19.9 (573)	16.9(30)	20.0(477)	20.7(66)
35-44	22.3(328)	14.5(8)	22.4(264)	23.9(56)	19.3(467)	22.5(9)	19.4(452)	10.3(6)	21.2 (612)	23.6(42)	20.7(494)	23.8(76)
45-54	17.0(249)	25.5(14)	16.9(199)	15.4(36)	17.8(431)	20.0(8)	17.8(414)	15.5(9)	18.2(525)	20.2(36)	17.6(419)	21.9(70)
55-64	11.8(174)	23.6(13)	12.4(146)	6.4(15)	13.8(334)	15.0(6)	13.7(318)	17.2(10)	12.3(354)	12.9 (23)	12.6(301)	9.4(30)
65+	9.3 (136)	10.9(6)	10.3(122)	3.4(8)	9.3(226)	17.5(7)	9.3(216)	5.2(3)	10.8(312)	10.7(19)	11.9(284)	2.8(9)
Gender, % (n)												
Male	50.9 (748)	61.8 (34)	48.1(567)	62.6(147)	54.0(1309)	65.0(26)	53.2(1238)	77.6(45)	54.1(1558)	63.5(113)	52.3(1249)	61.6(196)
Female	49.1 (722)	38.2(21)	51.9(613)	37.4(88)	46.0(1115)	35.0(14)	46.8(1088)	22.4(13)	45.9(1324)	36.5(65)	47.7(1137)	38.4(122)
Social status, % (n)												
AB	15.4(227)	10.9(6)	17.2(203)	7.7(18)	15.4(374)	0(0)	15.8(367)	12.3(7)	15.0(431)	10.7(19)	15.6(371)	12.9(41)
C1	24.1(354)	5.5(3)	25.1(297)	23.1(54)	26.5(643)	10.3(4)	26.8(623)	28.1(16)	24.4(702)	19.7(35)	24.8(592)	23.6(75)
C2	25.5(375)	27.3(15)	24.2(286)	31.6(74)	24.1(583)	30.8(12)	24.2(563)	14.0(8)	25.9(745)	27.5(49)	25.2(601)	29.9(95)
D	21.6(317)	35.4(19)	20.5(242)	23.9(56)	20.0(485)	35.9(14)	19.6(456)	26.3(15)	21.1(609)	22.5(40)	21.0(502)	21.1(67)
E	13.4(197)	21.8(12)	13.0(153)	13.7(32)	13.9(337)	23.1(9)	13.6(317)	19.3(11)	13.7(394)	19.7(35)	13.4(319)	12.6(40)
Type of Tobacco smoked, % (n)												
Cigarettes	65.2(883)	21.2(11)	70.8(762)	48.7(110)	60.2(1191)	16.7(6)	61.9(1172)	26.5(13)	56.1(1384)	38.8(57)	58.5(1191)	47.9(136)
Cigarettes & RYO	9.6(130)	3.8(2)	7.5(81)	20.8(47)	6.2(123)	2.8(1)	5.9(111)	22.4(11)	6.5(160)	5.8(8)	6.0(123)	10.1(29)
RYO only	25.2(341)	75.0(39)	21.7(233)	30.5(69)	33.6(664)	80.6(29)	32.2(610)	51.0(25)	37.4(924)	55.5(81)	35.5(724)	42.0(119)
Cigarettes per day (CPD), mean (sd)	13.4(8.75)	15.8(9.67)	12.7(8.6)	15.9(8.8)	12.3(8.2)	16.1(9.8)	12.2(8.1)	14.7(9.9)	12.1(8.29)	12.6(8.57)	11.9(8.3)	13.4(7.9)
Time to first cigarette,% (n)												
>61 minutes	19.0(280)	7.3(4)	19.7(233)	18.3(43)	28.7(696)	20.0(8)	28.9(672)	27.6(16)	29.8(860)	35.2(63)	30.4(724)	23.0(73)
31-60 minutes	29.1(428)	20.0(11)	31.2(368)	20.9(49)	19.6(475)	12.5(5)	19.8(461)	15.5(9)	20.5(591)	11.2(20)	21.5(512)	18.6(59)
6-30 minutes	31.4(462)	40.0(22)	30.1(355)	36.2(85)	31.4(762)	32.5(13)	31.5(732)	29.3(17)	31.7(913)	34.6(62)	31.1(742)	34.3(109)
<5 minutes	20.3(299)	32.7(18)	18.9(223)	24.7(58)	19.6 (474)	32.5(13)	19.1(445)	27.6(16)	17.6(507)	19.0(34)	16.7(399)	23.3(74)

of response in 2012. Data weighted to match the 2001 census; n = Number; sd = Standard Deviation; RYO = 'roll your own' tobacco; DP = Duty-paid; Social Status categories: AB = higher and intermediate professional/managerial, C1 = supervisory, clerical, junior managerial administrative/ professional, C2 = skilled manual workers, D = semi-skilled and unskilled manual workers and E = on state benefit, unemployed, lowest grade workers

The average number of cigarettes per day smoked by exclusive illicit tobacco users was lowest in 2012 at 13 (SD = 8.14); compared with 16 (SD = 8.97) in 2007-8 and 15 (SD = 9.82) in 2010-11 ($\chi^2 = 13.57$ (*df* 2), $p=0.001$). In addition, more smokers of manufactured cigarettes reported exclusive illicit tobacco purchase in 2012 (38.8%; $n = 57$); compared with previous time points (2007-8: 21.2%; $n = 11$; 16.7%; $n=6$) ($\chi^2 = 14.30$ (*df* 2), $p=0.001$).

Table 8.2 shows the regional differences in reports of illicit tobacco purchase in 2012. The South West became the region with the highest concentration of exclusive illicit tobacco purchase in 2012 (19.7%; $n=35$, CI 18.1–21.3); unlike the North West and the East of England in 2007-8 and 2010-11 respectively. London went from having one of the lowest reports of exclusive illicit tobacco use in 2007-8 and 2010-11 to having the second highest prevalence in 2012 (15.2%; $n = 27$; CI 18.7–27.3). The South East had the highest concentration of duty-paid and illicit tobacco purchase in 2012 (18.6%; $n=59$, CI), this was the North West in 2007-8 (18.2%; $n = 43$; CI) and the South West in 2010-11 (18.6%; $n = 11$; CI). This regional variation in reported illicit tobacco use was statistically significant ($\chi^2 = 65.627$ (*df* 8); $p<0.001$), however the numbers reported here are small and the STS is not powered to detect regional differences.

Table 8.2: Reported purchase of illicit and duty-paid tobacco and cigarettes by English region in 2012

	% (n)		
	Illicit tobacco only	DP and illicit tobacco	DP only
North East	7.3 (13)	5.3 (17)	6.4 (153)
North West	12.9(23)	10.1 (32)	15.9 (378)
Yorkshire and	15.2(27)	6.6 (21)	11.4 (272)

the Humber

East Midlands	6.2 (11)	7.9 (25)	7.7 (183)
West Midlands	5.6 (10)	8.8 (28)	12.5 (299)
East of England	5.1 (9)	11.3 (36)	11.1 (264)
London	15.2 (27)	17.6 (56)	11.7 (279)
South East	12.9 (23)	18.6 (59)	14.0 (333)
South West	19.7 (35)	13.8 (44)	9.4 (223)

Note: Data weighted to match the 2001 census; n = Number; DP = Duty-paid

8.4.2 Sources of cigarette and tobacco purchase

Table 8.3 shows the sources of smokers' tobacco and cigarette purchases. Once 'under the counter' purchases in newsagents, off licences and corner-shops were introduced as a possible source of illicit tobacco in this study, this source replaced purchases from friends as the most popular in 2012 (11.3%; 95% CI 10.1 – 12.5). In addition, people who sell cheap cigarettes in the street were a less popular source of illicit tobacco than people selling them in pubs in 2010-11 in contrast to 2007-8 and 2012.

Table 8.3: Sources of smokers' duty-paid and illicit tobacco and cigarette purchases in England in 2012

	% (N)	95% CI
Sources of duty paid tobacco		
Newsagent/ Off licence	63.9 (2018)	62.2 – 65.6
Petrol garage	19.5 (615)	18.1 – 20.9
Supermarket	52.7 (1665)	51.0 – 54.4
Cash and carry	1.5 (46)	1.1 – 1.9
Internet	0.3 (11)	0.1 – 0.5
Pub (behind the bar)	1.2 (38)	0.8 – 1.6
Pub (vending machine)	1.7 (53)	1.3 – 2.2
Buy them from abroad and bring them back with me	7.3 (232)	6.4 – 8.2
Sources of illicit tobacco		
Pub (someone who comes round selling cheap cigarettes)	0.7 (22)	0.4 – 1.0
People who sell cheap cigarettes in the street	1.5 (47)	1.1 – 1.9
People in the local area who are trusted sources of cheap cigarettes	1.7 (55)	1.3 – 2.2
Buy them cheap from friends	4.7 (149)	4.0 – 5.4
Newsagents/Off licences – 'under the counter'	11.3 (356)	10.2 – 12.4

Note: Data weighted to match the 2001 census; Responses were not mutually exclusive

Smokers reporting both duty-paid and illicit tobacco purchase accessed more illicit sources (in some instances all five); whereas exclusive illicit tobacco users mainly reported use of one illicit source (Table 8.4). Overall, the percentage of smokers who reported using more than one illicit source for their tobacco purchase decreased from 27.4% (n=86) in 2007-8 but increased from 10.9% (n=12) in 2010-11 to 15.6% (n=48).

Table 8.4: Number of sources reportedly used by smokers to purchase illicit tobacco in 2012

Number of sources used	% (n)	
	Illicit tobacco only	Both licit and illicit
1	98.9 (177)	85.5 (272)
2	1.1 (2)	8.8 (28)
3	0 (0)	3.8 (12)
4	0 (0)	1.3 (4)
5	0 (0)	0.6 (2)

Note: Data weighted to match the 2001 census; n = Number

8.4.3 Characteristics associated with illicit tobacco purchase

Being male (OR=1.33, $p=0.007$), a RYO smoker (OR=1.49, $p<0.001$) and having high tobacco dependence (OR=1.10, $p=0.005$) were significantly associated with reporting any illicit tobacco purchase. There was no evidence of associations between illicit tobacco use and socio-economic status (Table 8.5). Whereas, smokers in age groups 16 – 54 years had significant odds of reporting illicit tobacco use (Table 8.5).

Table 8.5: Association between socio-demographic characteristics and tobacco dependence with report of illicit tobacco purchase in 2012

	OR	95% CI	p value
Sex			
Men	1.33	1.08 – 1.63	0.007
Women	<i>Reference</i>		
Age			
16-24	1.76	1.16 – 2.65	0.008
25-34	1.64	1.10 – 2.45	0.015
35-44	1.73	1.15 – 2.59	0.008
45-54	1.82	1.21 – 2.74	0.004
55-64	1.34	0.86 – 2.08	0.192
65+	<i>Reference</i>		
Social status			
AB	<i>Reference</i>		
C1	1.03	0.66 – 1.60	0.894
C2	1.09	0.71 – 1.68	0.687
D	1.02	0.66 – 1.59	0.919

E	1.17	0.77 – 1.78	0.466
Tobacco dependence			
HSI	1.10	1.03 – 1.18	p=0.005
Smokes RYO	1.49	1.21 – 1.84	p<0.001

Note: OR = Odds ratio, CI = Confidence interval; Social status categories: AB = higher and intermediate professional/managerial, C1 = supervisory, clerical, junior managerial administrative/ professional, C2 = skilled manual workers, D = semi-skilled and unskilled manual workers and E = on state benefit, unemployed, lowest grade workers; HSI = Heaviness of Smoking Index; RYO = 'roll your own' tobacco

A time by demographic and tobacco dependence interaction although significant in the unadjusted model, was not in the adjusted model (Table 8.6). Additionally, the change in prevalence of illicit tobacco use between time points was statistically significant in both adjusted and unadjusted logistic models (Table 8.6).

Table 8.6: Regression analysis assessing the change in prevalence of illicit tobacco use between time points

	Unadjusted			^a Adjusted		
	OR	95% CI	p value	OR	95%CI	p value
Time 1 (2007-8)	1.65	1.43 – 1.90	p<0.001	1.74	1.50 – 2.02	p<0.001
Time 2 (2010-11)	0.31	0.25 – 0.37	p<0.001	0.30	0.24 – 0.37	p<0.001
Time 3 (2012)	1.37	1.22 – 1.53	p<0.001	1.30	1.15 – 1.48	p<0.001
Interactions						
Time*Age	.991	0.98 – 1.00	p<0.001	0.99	0.99 – 1.00	p=0.547
Time*Sex	1.14	1.06 – 1.23	p=0.001	0.98	0.89 – 1.09	p=0.800
Time*SS	0.99	0.94 – 1.06	p=0.889	0.96	0.89 – 1.04	p=0.373
Time*Tobacco dependence	1.11	1.08 – 1.14	p<0.001	1.01	0.97 – 1.04	p=0.607

Note: OR = Odds ratio, CI = Confidence interval; ^aAdjusted for age, sex, social status and tobacco dependence; SS = Social status

8.5 Discussion

Seventeen percent of smokers reported purchase of illicit tobacco use in 2012, an increase from 2010-11. When ‘under the counter’ purchase of cheap tobacco in shops was added as an illicit source in 2012, this became the most commonly cited source of cheap tobacco. In line with the previous surveys in 2007-8 and 2010-11, exclusive illicit tobacco users reported using either 1 or 2 sources to access cheap illicit tobacco; whereas non-exclusive illicit tobacco users accessed multiple sources. Those reporting illicit tobacco purchase in 2012 were more tobacco dependent, more likely to be male and a RYO smoker compared with those purchasing duty-paid tobacco. Interestingly, both young and old smokers had significant odds of reporting illicit tobacco use in 2012.

The most likely reason for the significant increase in prevalence of illicit tobacco use observed in the current study compared with 2010-11 is the addition of ‘under the counter’ purchases as an illicit tobacco source. This may have resulted in an under-estimation of illicit tobacco use in the 2010-11 survey. This finding reinforces the need for qualitative research exploring smokers’ views as well as routine and robust measures of illicit tobacco trade, to pick up on and explore changes in sources of illicit tobacco. Although, it is evident that the inclusion of ‘under the counter’ as an illicit tobacco source impacted on estimates of illicit tobacco use, when its figures were excluded in the 2012 study, there appeared to be a slight increase in illicit tobacco use between 2010-11 and 2012. There are two possible explanations for this increase. Firstly, due to the criminal nature of the illicit trade, it is possible that the market has evolved to combat the policy measures implemented by HMRC. Possibly, cigarette and tobacco smugglers may have invented new means of eluding customs officials and getting tobacco products through the

distribution chain. This possibility is affirmed by the first hand report from a cigarette smuggler that he changed his transportation methods as a direct response to law enforcement tactics (L'Hoiry 2013). Secondly, the increasing share of 'cheap whites' (factory made tobacco products manufactured for the sole purpose of being smuggled and sold illegally) in the UK tobacco market (HMRC, 2011a) may have encouraged illicit tobacco purchase as smokers' use of illicit tobacco is related to availability as well as price (Moodie et al., 2011a). This in turn may Nonetheless, there appeared to be an overall decline in illicit tobacco use between 2007-8 and 2012 and this is consistent with HMRC estimates covering these time points (13% of cigarette market share in 2007-8 to 9% in 2010-11) (HMRC 2011c; HMRC, 2012); and reports from other sources (NEMS, 2011; Klynveld Peat Marwick Goerdeler (KPMG), 2011).

With the elimination of some sources of illicit tobacco, it is possible that new sources will emerge to replace lost ones, due to the demand for cheap tobacco products in a country such as the UK which has one of the most expensive tobacco products in Europe. Shop retailers appear to be a newly identified prominent source of illicit tobacco, as the study reported in this chapter and the previous one, as well as reports from other sources (Trafford Council press release, August 2012; Convenience store news, October 2012) suggests. This is the first national survey to show 'under the counter' sales in shops as a common source of illicit tobacco. The driver for this source could possibly be that shopkeepers can make more profit from illicit tobacco sales than duty-paid sales. This finding however is of particular concern for tobacco control efforts in light of tobacco industry arguments that ban on POS displays will promote an 'under the counter culture' that will blur the line between legitimate and

illicit tobacco (British American Tobacco (BAT), 2013). The ban on POS displays is set to come into effect for small retailers in England in April 2015 so this is unlikely to explain the emergence of this category currently (UK Parliament, 2010). Prior to the implementation of this policy, there is the need to introduce more enforcement strategies by Trading Standards and HMRC, with severe penalties attached to deter retailers from engaging in illicit tobacco trade.

Interestingly, although it appeared that a new illicit tobacco source emerged in this study, the majority of exclusive illicit tobacco users continued to report use of a single source. A possible explanation for this could be that these smokers are dedicated illicit tobacco users with established illicit sources where they are sure of the products purchased. Future research into illicit sources may provide a better understanding of the accessibility and availability of illicit tobacco.

Similar to the findings in the previous surveys (Chapter 7), illicit tobacco use was associated with high tobacco dependence, RYO tobacco use and being male in this study. In contrast to the previous surveys, there was no significant association between illicit tobacco use and socio-economic status in the current study. This is of interest and suggests that illicit tobacco use may have become more widespread in socio-economic groups. The recent recession in conjunction with the escalating cost of tobacco products in the UK may have driven more smokers to engage in price-minimising behaviours which could have included purchase of illicit tobacco. Of interest is the finding that, unlike the previous surveys, this study found significant odds of reporting illicit tobacco use in both younger and older smokers (with the 45-54 age groups

having the highest odds). This suggests that more recently, purchase of illicit tobacco has become a common practice in older smokers as well as younger smokers. This highlights the changing nature of the illicit tobacco use in terms of demand. This finding holds particular importance for the development of targeted anti-illicit tobacco trade campaigns aimed at deterring this purchasing behaviour.

This study was subject to the same limitations as in the previous survey studies. Firstly, this study relied on participants' reports of tobacco purchasing in the previous 6 months and so is subject to recall bias. Secondly, some smokers may have been reluctant to report purchase of cheap 'illicit' cigarettes in a face-to-face survey; however as already mentioned this is improbable as the purchase of illicit tobacco is currently not illegal in the UK and there is nothing to suggest that perceptions of it have changed over the five years. Other limitations include the lack of data on ethnicity in the STS and its data collection being restricted to England and so not a representation of the whole of the UK. Nonetheless, this study provided important new developments in the nature of the illicit tobacco market in England which may have potential policy implications.

8.6 Conclusion

The prevalence of illicit tobacco use appeared to increase between 2010-11 and 2012, however there was an overall decrease compared to 2007-8 estimates. The characteristics of those reporting illicit tobacco purchases varied between 2007-8, 2010-11 and 2012. Moreover, it appears that this illegal purchasing behaviour is becoming more widespread across different age groups and social grades. In order for illicit tobacco trade to be effectively tackled it is important

that policy makers acknowledge its evolving nature both in demand and supply. This will consist of continuous monitoring and investigating of the illicit tobacco trade, as those involved adapt to policy responses. Illicit tobacco use is still posing a serious threat to tobacco control and if the full potential effect of tobacco tax increases is to be realised, then combating this illegal trade needs to stay a priority.

CHAPTER 9

PRICE ESTIMATES FOR CIGARETTES AND TOBACCO PURCHASED FROM DUTY-PAID AND ILLICIT SOURCES: A NATIONAL SURVEY OF ENGLISH SMOKERS

9.1 Introduction

The price elasticity for tobacco – that is, the effect of price on demand for cigarettes - has been estimated at -0.4 and -0.8 for developed and developing countries respectively (Jha and Chaloupka, 1999). Based on these estimates, a 10% increase in tobacco prices would result in an estimated overall fall in consumption of 4% in developed countries and 8% in developing countries. Price elasticity is reportedly greater among younger and poorer smokers making them more responsive to tobacco price increases (Chaloupka and Pacula, 1999; Ross and Chaloupka, 2003; Farrelly et al., 2001).

It has been established that higher tobacco prices are associated with lower levels of consumption, reduced prevalence, increased cessation and reduced initiation (Chaloupka et al., 2000; Levy et al., 2000; Frieden et al., 2005). The UK Government applies the higher end price elasticity estimate of -0.72 when determining tax rates and cigarette prices (Cullum and Pissarides, 2004). In the UK, the average recommended retail price of a pack of 20 cigarettes (in the most popular price category) was £5.33 in 2007; £6.13 in 2010 and £7.47 in 2012 (Tobacco Manufacturers Association, 2013). As of 2012, the UK had one of the highest prices for tobacco products in Europe, with overall tax accounting for 78% and excise tax for 62% of the retail price for a packet of cigarettes in the premium category (HMRC, 2012a). Tax increases (above the rate of inflation) are the single most effective population level policy to

encourage smokers to quit (Jha and Chaloupka, 1999) and despite the high tax rates already applied in the UK, some experts believe that there is scope for further tax increases on tobacco products (Guindon et al., 2002; Blecher et al., 2012).

Measures of tobacco price elasticity rarely take into consideration the impact of the illicit tobacco market. However, two studies which attempted to adjust for the effects of smuggling yielded similar price elasticity between the range of -0.45 to -0.62 (Yurekli and Zhang, 2000; Gruber and Stabile, 2003). This price elasticity does not differ greatly from previous estimates not accounting for illicit tobacco trade and a reason for this could be the difficulties in accurately estimating the size of the illicit market. There is also some evidence that higher cigarette prices are associated with an increased motivation to quit smoking, an effect which was not mitigated by cheaper cigarette sources (Ross et al., 2010).

Although higher taxes on tobacco significantly reduce tobacco consumption while providing a major source of government revenue, tobacco taxation is perceived as controversial (Gruber and Kőszegi, 2008). This is because tobacco taxes could be viewed as regressive since lower-income groups spend a higher share of their income on tobacco (Gruber and Kőszegi, 2008) and those who do not quit or reduce consumption in response to price rises face greater financial burden. Lower income smokers are on average more tobacco dependent (Siahpush et al., 2006) and this results in greater consumption and thus greater expenditure on tobacco.

Over the last two decades, the price of cigarettes has increased steadily above

the rate of inflation in the UK. When cigarette prices go up, some smokers may resort to price minimizing behaviours whilst others pay the high price (Choi et al., 2012; Xu et al., 2013). Besides quitting and consumption reduction, some smokers may switch to less expensive brands or engage in tax avoidance behaviours (purchase of tobacco products in lower tax jurisdictions by those in high tax jurisdictions) (Hyland et al., 2005; White et al., 2013). The tobacco industry encourages the latter by providing a range of premium, mid-priced and economy brands to cater for individuals' budget constraints (Anderson et al., 2002); thus the price paid for legitimate duty-paid tobacco could vary according to brand purchased. It has been suggested that the tobacco industry uses these compensating pricing strategies such as the development of lower price branded generics and the introduction of multipack discounts to offset increases in taxes (Chaloupka et al., 2002). This is debatable, because it has also been purported that increases in taxes can be accompanied by increases in prices (Gilmore, 2011). In addition, tobacco companies appear to have kept the lowest cigarette prices down by absorbing tax increases, and cross-subsidising these with real price increases on higher price cigarettes at the time of tax increases (Gilmore et al., 2013), thereby keeping cigarettes affordable for poorer smokers.

Associations have been found between the purchase of discount or generic cigarette brands and tax avoidance, and being white, of an older age (45 – 55+ years), having high tobacco dependence, low income, lower education and lower socio-economic groups (Cummings et al., 1997; Li et al., 2010). Poorer and heavier smokers were found to be more sensitive to changes in cigarette prices and more likely to engage in tax avoidance behaviours (Hyland et al., 2005). Unsurprisingly smokers who engage in price minimising behaviour

have similar characteristics to those who report the purchase of illicit tobacco (Taylor et al., 2004; Lee and Chen, 2006; McEwen and Strauss, 2009; Chen et al., 2010).

In the UK cigarette market there is an increasing number of smokers switching to lower priced discount brands seemingly because they are unable to afford or are unwilling to pay for premium brands (Devlin et al., 2003). There is evidence that when faced with a tobacco tax increase only a small proportion of smokers reported quitting smoking (9.7%); whereas nearly half (48%) reported reducing the amount they smoked and/or changing the brand purchased, as well as switching from manufactured to hand-rolled cigarettes (Kengganpanich et al., 2009). Considering the variations in cigarette prices, some smokers are therefore able to mitigate the effect of tax increases, thereby undermining policies aimed at reducing smoking prevalence through increased prices. It is therefore possible that, although some smokers do not report illicit tobacco purchase, they may still be able to obtain tobacco products at a reduced price, therefore the current study sought to estimate the price of duty-paid cigarettes and roll your own (RYO) tobacco to determine whether this was the case. In addition, this study sought to determine which socio-demographic factors were associated with reduced price estimates for purchases from duty-paid sources. This could indicate which smokers are most likely to engage in price minimising strategies in England.

An issue with estimating the extent of illicit tobacco trade using self-reported data is that some smokers may be reluctant to report its use due to its illegal nature (see Chapter 2); thereby resulting in a possible underestimation of the illicit tobacco market. Another means of estimating illicit tobacco trade is by

determining the price paid for tobacco products purchased from certain sources. The International Agency for Research on Cancer (IARC) handbooks on methods for evaluating tobacco control policies (IARC, 2008) and on tobacco taxation for the Pricing Policies and Control of Tobacco in Europe (PPACTE) project (IARC, 2011) describe collecting self-reported data on purchase source and price as a measure of illicit tobacco trade. It is believed that this can help assess the extent of various forms of individual tax avoidance, including cross-border shopping, direct purchases and duty-free purchases (Gallus et al., 2009). Therefore, it is important to distinguish the price of duty-paid tobacco products from the price of illicit tobacco products. One would expect that tobacco products purchased from illicit sources would be much cheaper than those obtained from duty-paid sources. Moreover, there is limited research to suggest exactly how much cheaper illicit tobacco is compared with duty-paid. Some suggest this to be almost half the price of duty-paid tobacco (West et al., 2008), whereas others estimate it to be 75% less than duty-paid products (Financial Action Task Force Report, 2012).

It is important to acknowledge that tobacco control policies such as raising the legal age for purchasing tobacco in October 2007, the ban on sale of tobacco products from vending machines in October 2011 and the ban on Point of Sale (POS) displays in 2012; implemented during the period of data collection for the current study may have impacted on tobacco purchasing sources and thus price paid for tobacco products.

9.2 Study aims

The aim of this current study was to estimate and compare how much smokers in England paid for cigarettes and RYO tobacco purchased from duty-paid and

illicit sources in 2007/08, 2010-11 and 2012. In addition, it sought to investigate the socio-demographic and smoking characteristics associated with price estimates for purchases from duty-paid sources.

This study had the following research objectives:

1. Estimate how much smokers paid for cigarettes and RYO tobacco in 2007-8, 2010-11 and 2012.
2. Determine how price estimates for cigarettes and RYO tobacco purchased from duty-paid and illicit sources differed over time.
3. Determine how price estimates for cigarettes and RYO tobacco differed according to purchase source.
4. Determine how price estimates for duty-paid cigarettes and RYO tobacco compared with illicit cigarettes and RYO tobacco.
5. Determine whether there were significant associations between duty-paid price estimates for cigarettes and RYO tobacco and socio-demographic factors and tobacco dependence.

9.3 Methods

9.3.1 Study design and sampling

Data for this study were collected in December and March to May 2008, December 2010 to May 2011 and May to December 2012 through the Smoking Toolkit Study (STS, www.smokinginengland.info). There is a cost to adding questions to the STS and in 2008 this was funded by the charity Action on Smoking and Health (ASH), however budget constraints prevented data collection in January and February 2008. In 2010-11 and 2012 data collection was funded by Cancer Research UK.

Survey participants for this study were randomly recruited as in the previous

studies (see Chapter 4 for detailed methodology).

9.3.2 Measures

Smoking status was assessed by asking: ‘Which of the following best applies to you? - I smoke cigarettes (including hand-rolled) every day; I smoke cigarettes (including hand-rolled), but not every day; I do not smoke cigarettes at all, but I do smoke tobacco of some kind (e.g. pipe or cigar); I have stopped smoking completely in the last year; I stopped smoking completely more than a year ago; I have never been a smoker (i.e. smoked for a year or more); Don't Know’. Participants were eligible for inclusion in the current study if classified as current smokers; this was assessed by asking participants to state their smoking status. Unit values for cigarette consumption were measured using the following question ‘How many cigarettes per day do/did you usually smoke’.

Those who did not smoke every day could give a figure per week or per month and this was converted into weekly consumption. Unit values for cigarette expenditure were measured using the question - ‘On average about how much per week do you think you spend on cigarettes or tobacco’. Participants were asked to answer this if they were fairly confident they knew. Weekly expenditure and consumption were used to calculate the unit values for a 20 pack of cigarettes and roll ups. In 2007-8 and 2010-11 smokers who responded that they had purchased illicit tobacco in the last six months were also asked explicitly: ‘On average, when you buy these cheap cigarettes in this country, how much did you pay for a packet of 10 cigarettes, 20 cigarettes and 50g pouch? Due to budget constraints, this question was not included in the Smoking toolkit study in 2012.

Current smokers were asked questions to determine their socio-demographic

characteristics (i.e. age, gender and socio-economic status). Social status was classified as follows: AB=higher and intermediate professional/managerial; C1=supervisory, clerical, junior managerial/administrative/professional; C2=skilled manual workers; D=semiskilled and unskilled manual workers; E=on state benefit, unemployed, lowest grade workers. The Heaviness of Smoking Index (HSI) which combines scores on cigarette consumption per day and time to first cigarette of the day was used as a measure of tobacco dependence (Kozlowski et al., 1994).

Illicit tobacco purchase was assessed by asking participants, 'In the last 6 months, have you bought any cigarettes or hand rolled tobacco from any of the following? – newsagent\off licence\corner-shop, petrol garage shop, supermarket, cash and carry, internet, pub (behind the bar), pub (vending machine), pub (somebody who comes round selling cigarettes cheap), people who sell cheap cigarettes on the street, people in the local area who are a ready supply of cheap cigarettes, buy them cheap from friends, buy them from abroad and bring them back with me, other, have not bought any in the last 6 months and don't know. Participants who reported purchasing cheap tobacco from individuals that sell cheap cigarettes in the pubs, those that sell cheap cigarettes on the street, persons that are trusted sources of cheap cigarettes in the local area and buying cheap cigarettes from friends were classified as purchasing illicit tobacco. In 2012 this included the category 'newsagents\off-licences\corner shop - under the counter'. It is important to note that due to the addition of this new category in 2012, it is not possible to make direct comparisons (in terms of key findings such as illicit tobacco prevalence) between the follow-up survey and the surveys conducted in 2007-8 and 2010-11. Participants' purchasing behaviours were classified into 3 groups (duty-paid (DP) only, DP and illicit tobacco and illicit tobacco only) in order to get a

true measure of smokers' type of tobacco purchase.

9.3.3 Statistical analysis

Data were analysed using SPSS version 21.0. Price estimates for cigarettes and tobacco were derived using the following equation: Price paid per packet of 20 cigarettes = (weekly cigarette expenditure / weekly cigarette consumption)*20. In order to account for inflation, unit values for expenditure and illicit tobacco users' reports on price paid for tobacco products were converted into real prices using the Retail Price Index (RPI) as a deflator. This was calculated using the following equation: (Real price for current year) = (RPI for base year/RPI for current year)*nominal price in current year) (UK House of Commons, 2009). RPI values for both years were obtained from the UK Office for National Statistics (ONS) website. Price estimates that fell above the most expensive premium brand cigarettes and tobacco (according to supermarket prices) and below the cheapest illicit tobacco price (estimated at 75% less than duty-paid products (Financial Action Task Force (FATF), 2012) at all time points were excluded (n = 602 in 2007-8; n = 837 in 2010-11 and n = 1108 in 2012). This was done under the assumption that these price estimates were 'implausible' and due to miss-recording of weekly tobacco consumption or expenditure.

Normality was assessed using histograms, normal probability plots and the Kolmogorov-Smirnov (K-S) statistic. Price estimates were statistically non-normal; thus Kruskal-Wallis and Mann Whitney U tests were applied to assess between-group differences in prices of duty-paid and illicit cigarettes and RYO tobacco at the three time points. Regression analyses were used to determine the associations between duty-paid price estimates for cigarettes and RYO tobacco and socio-demographic factors and tobacco dependence. The

assumption of ‘non-multicollinearity’ was assessed by calculating Tolerance Values and Variance Inflation Factors (Menard, 1995; Myers, 1990). In addition, the test of independence of residuals was conducted using the Durbin-Watson test (Durbin & Watson, 1951). None of these assumptions were violated. Statistical significance was set at $p < 0.05$.

9.3.4 Ethical approval

Ethical approval was granted by the University College London Research Ethics Committee.

9.4 Results

Between December 2007 and March to May 2008, 6,895 participants were surveyed, of which 1,595 (23%) were current smokers. From December 2010 to May 2011, 12,302 participants were surveyed and 2,774 (22.5%) were current smokers. Between May and December 2012, 14,229 were surveyed and 3,219 (22.6%) were current smokers.

Participants classified as current smokers who responded ‘none’, ‘don’t know’ or ‘other’ (mostly repetitions of answers already given or answers were not legible) to the question on the source of tobacco purchase were excluded ($n = 43$ in 2007-8; $n = 120$ in 2010-11 and $n = 59$ in 2012).

Overall price estimates for cigarettes across the three time points were: £4.10 (Standard Deviation (SD) = 1.45 in 2007-8, £4.73 (SD = 1.72) in 2010-11 and £4.76 (SD = 1.77). For RYO tobacco these were: £1.96 (SD = 0.69) in 2007-8, £2.49 (SD = 0.85) in 2010-11 and £2.50 (SD = 0.88) in 2012. There was a difference in price estimates for cigarettes and RYO tobacco according to source of purchase in 2007-8, 2010-11 and 2012 (Table 9.1), with all figures

being statistically significant ($p < 0.001$).

Table 9.1: Average price estimates for cigarettes and tobacco according to smokers' reported sources of purchase in 2007-8, 2010-11 and 2012

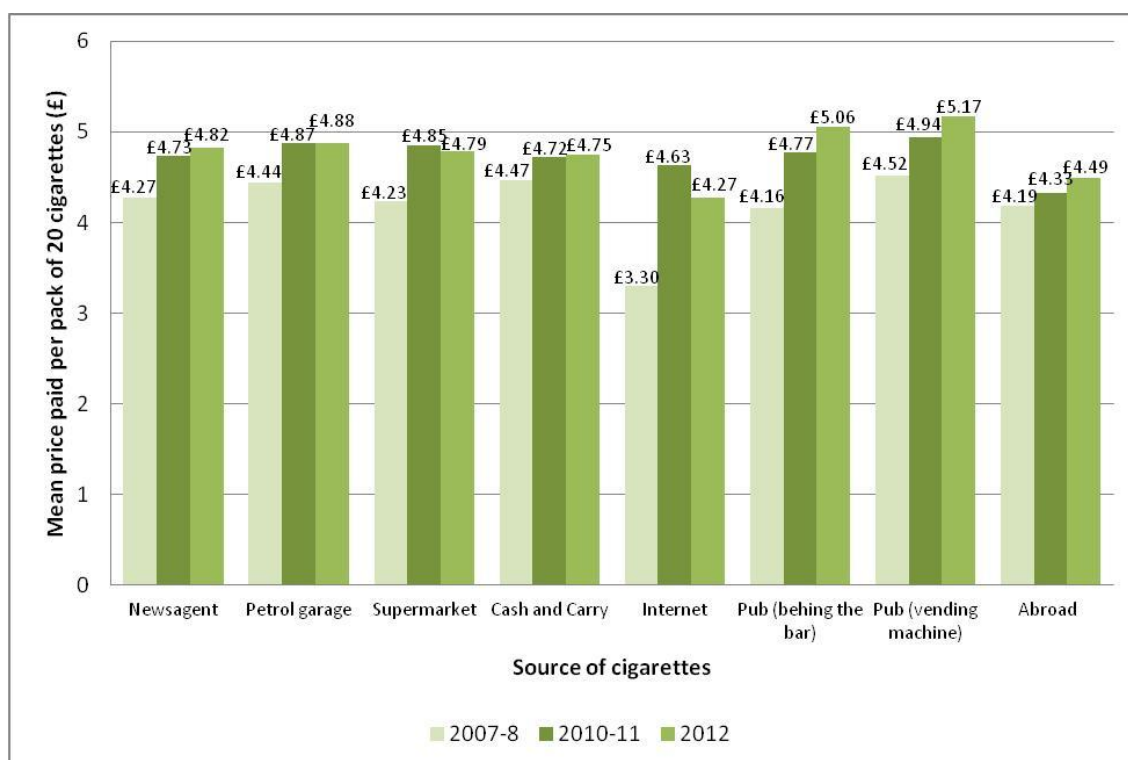
	2007-8 (n=1358)^a		2010-11 (n=2244)^a		2012 (n=2843)^a	
	Cigarettes Mean (SD) (£)	RYO ^b Mean (SD) (£)	Cigarettes Mean (SD) (£)	RYO ^b Mean (SD) (£)	Cigarettes Mean (SD) (£)	RYO ^b Mean (SD) (£)
Duty-paid tobacco only	4.22 (1.43)	1.99 (0.68)	4.76 (1.71)	2.51 (0.85)	4.80 (1.78)	2.53 (0.87)
Duty-paid and illicit tobacco	3.88 (1.46)	1.92 (0.69)	4.27 (1.81)	2.43 (0.87)	4.54 (1.73)	2.46 (0.89)
Illicit tobacco only	2.90 (1.18)	1.90 (0.78)	3.26 (1.63)	2.11 (0.66)	4.48 (1.71)	2.28 (0.90)
Total	4.10 (1.45)	1.96 (0.69)	4.73 (1.72)	2.49 (0.85)	4.76 (1.77)	2.50 (0.88)
	$\chi^2 = 209.74$ (df 2), $p < 0.001$	$\chi^2 = 106.41$ (df 2), $p < 0.001$	$\chi^2 = 165.27$ (df 2), $p < 0.001$	$\chi^2 = 25.88$ (df 2), $p < 0.001$	$\chi^2 = 71.64$ (df 2), $p < 0.001$	$\chi^2 = 118.26$ (df 2), $p < 0.001$

Note: ^an = the combined number of price estimates for cigarettes and RYO tobacco; ^b - represents price estimates for 20 cigarettes and 'roll-ups'; SD = Standard deviation; RYO = 'roll your own tobacco'; df = degrees of freedom

9.4.1 Price estimates for duty-paid cigarettes and tobacco

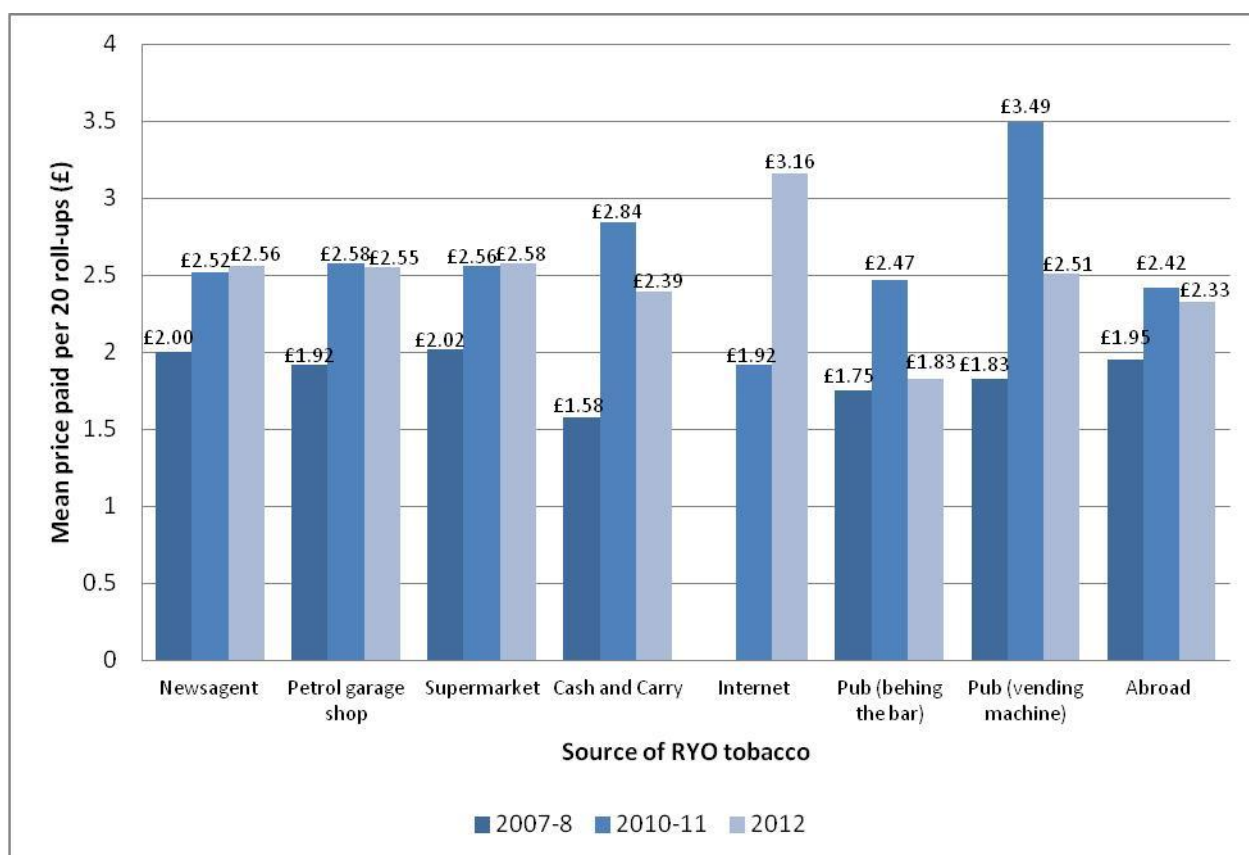
Smokers who exclusively purchased duty-paid products consistently reported paying the most for cigarettes and RYO tobacco in 2007-8; 2010-11 and 2012 (Table 9.1). There was some variation in the average price paid for cigarettes and RYO tobacco depending on the source of duty-paid purchase (Figures 9.1 and 9.2). For instance, purchases of duty-paid cigarettes from vending machines in pubs were the most expensive at all three time points (2007-8: £4.52, SD = 1.35; 2010-11: £4.94, SD = 1.46; 2012: £5.17, SD = 1.68). The internet was the cheapest source of duty-paid cigarettes in 2007-8 (£3.30, SD = 1.70) and 2012 (£4.27, SD = 1.58); this was purchases abroad in 2010-11 (£4.33, SD = 1.86).

Figure 9.1: Mean price paid for 20 cigarettes from duty-paid sources in 2007-8, 2010-11 and 2012



Duty-paid RYO tobacco was most expensive when purchased from the supermarket in 2007-8 (£2.02, SD = 0.64); from a vending machine in a pub in 2010-11 (£3.49, SD = 0.60) and on the internet in 2012 (£3.16, SD = 0.89). In contrast, the cheapest source of duty-paid roll ups in 2007-8 was the cash and carry (£1.58, SD = 0.67); while the internet was cheapest in 2010-11 (£1.92, SD = 0) and the pub behind the bar in 2012 (£1.83, SD = 0.40).

Figure 9.2: Mean price paid for 20 roll-ups from duty-paid sources in 2007-8, 2010-11 and 2012



9.4.2 Price estimates for illicit cigarettes and tobacco

Smokers who exclusively purchased illicit cigarettes paid on average £2.90 (SD = 1.18) for cigarettes in 2007-8; this was £3.26 (SD = 1.63) in 2010-11 and £ 4.48 (SD = 1.71) in 2012. Exclusive illicit cigarette buyers paid on average £1.90 (SD = 0.78) for 20 roll-ups in 2007-8, £2.11 (SD = 0.66) in 2010-11 and £2.28 (SD = 0.90) in 2012. Illicit cigarette purchase from persons in the pub was the most expensive source of cheap tobacco at all three time points, ranging from £4.05 in 2007-8 (SD=1.54) to £4.33 (SD = 1.70) in 2012 (Figure 9.3). The cheapest source of illicit cigarettes was friends at all time points (2007-8: £3.64, SD=1.46; 2010-11: £3.94, SD=1.84; 2012: £4.05, SD = 1.78; Figure 9.3).

Similar to illicit cigarettes, the most costly source of illicit RYO tobacco was persons in the pub (2007-8: £2.23, SD = 0.75; 2010-11: £2.74, SD = 0.95; 2012: £2.63, SD = 0.63) (Figure 9.4). In 2007-8, the most inexpensive source of illicit RYO tobacco was persons in the local area known to sell cheap tobacco (£1.83, SD = 0.74). In 2010-11 and 2012, this was street sellers (£0.09 and £0.25 more, respectively). Figures 9.3 and 9.4 show price estimates for cigarettes and RYO tobacco purchased from illicit sources in 2007-8, 2010-11 and 2012.

Figure 9.3: Mean price paid for a pack of 20 cigarettes from illicit sources in 2007-8, 2010-11 and 2012

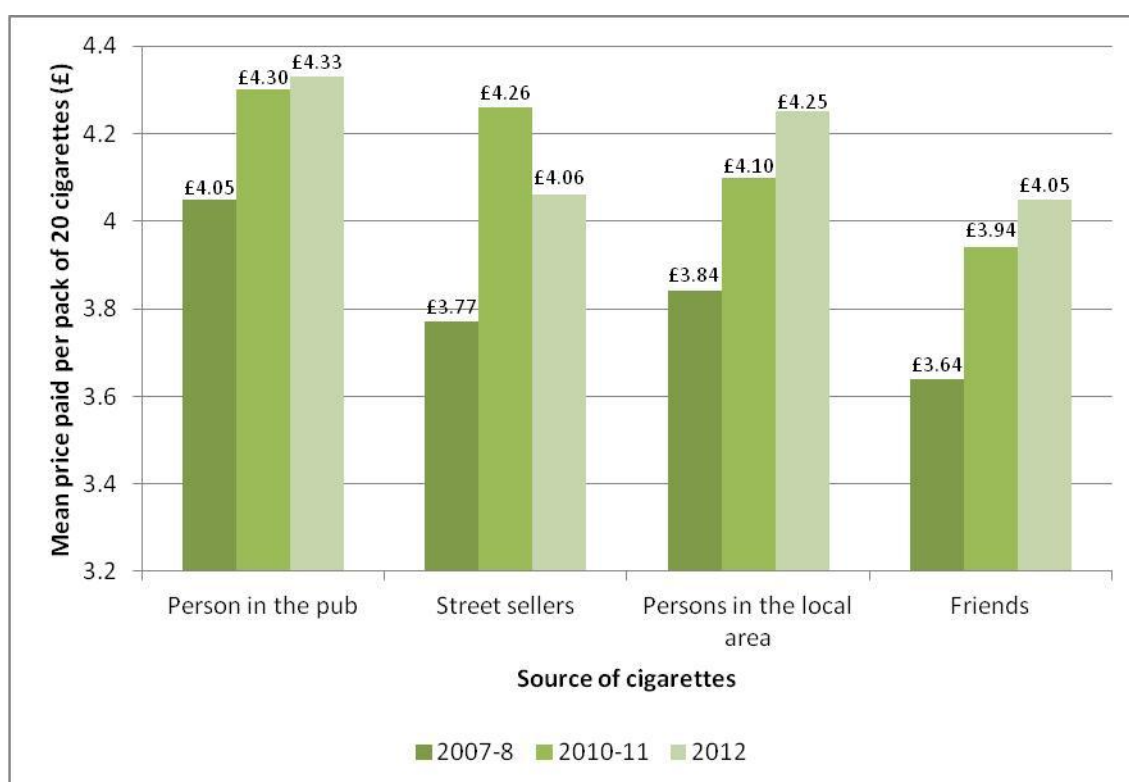
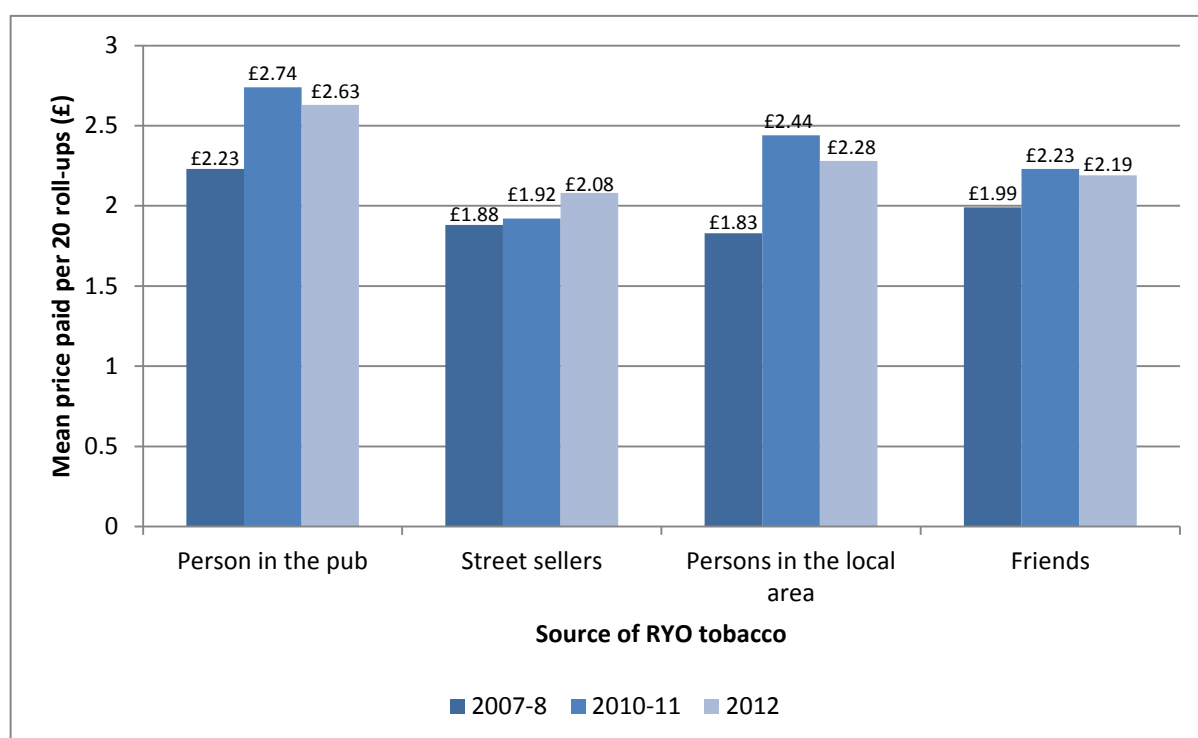


Figure 9.4: Mean price paid for 20 roll-ups purchased from illicit sources in 2007-8, 2010-11 and 2012



Smokers who reported the purchase of any illicit tobacco were asked to state how much they paid for these cigarettes and RYO tobacco purchased from illicit sources. Smokers could respond in accordance with how they purchased their cigarettes and tobacco i.e. pack of 10 cigarettes, pack of 20 cigarettes or 50g pouch. The reported price paid for a pack of 10 and 20 cigarettes a 50g pouch of tobacco increased between 2007-8 and 2010 (Table 9.2).

Table 9.2: Average price reportedly paid for tobacco and cigarettes purchased from illicit sources in 2007-8 and 2010-11

	2007-8 (n=1358) ^a		
	Cigarettes (10 cigs) Mean (SD) (£)	Cigarettes (20 cigs) Mean (SD) (£)	RYO (50g pouch) Mean (SD) (£)
2007-8	2.17 (0.59)	2.99 (1.04)	5.05 (1.39)
2010-11	2.20 (0.22)	3.53 (0.73)	5.65 (1.91)
	U = 26556.50, z = -7.712, p<0.001	U = 1558.50, z = -3.547, p<0.001,	U = 40527.00, z = -14.198, p<0.001

Note: RYO = 'roll your own' tobacco; SD = Standard deviation

9.4.3 Trend in reported price of duty-paid and illicit cigarettes and tobacco

Price estimates for cigarettes and RYO tobacco varied over time (Cigarettes: $\chi^2 = 1198.96$ (*df* 2), $p < 0.001$; RYO: $\chi^2 = 270.78$ (*df* 2), $p < 0.001$). The overall estimated average price paid by smokers for cigarettes and RYO tobacco increased between 2007-8, 2010-11 and 2012 (Cigarettes: £4.10, £4.73, £4.76 respectively; RYO: £1.96, £2.49, £2.50 respectively). The average price paid by smokers who purchased duty-paid cigarettes exclusively increased between 2007-8, 2010-11 and 2012 from £4.22 to £4.76 and £4.80, respectively (Table 9.1).

The price of 20 roll-ups of duty-paid tobacco also increased between 2007-8 and 2012, from £1.99 (SD = 0.68) to £2.51 (SD = 0.85) in 2010-11 and finally £2.53 (SD = 0.87) in 2012 (Table 9.1). The estimated price paid by exclusive illicit tobacco users for tobacco and cigarettes was the lowest at all time points (Table 9.1). Nonetheless, the estimated price paid by these same smokers also increased between 2007-8 and 2012 (Table 9.1). If anything, the results indicate that illicit tobacco suffered from the largest price increase, by £1.58 from 2007-8 to 2012, compared to duty-paid tobacco (£0.58). Likewise, the price paid by exclusive illicit tobacco users for 20 roll-ups increased between 2007-8 and 2012. Smokers who made both duty-paid and illicit cigarette purchases paid less compared with exclusive duty-paid purchasers at all time points and this also increased over time (Table 9.1). However, the price estimates for RYO tobacco purchased from some duty-paid and illicit sources increased in 2010-11 but decreased in 2012 (Figures 9.2 and 9.4).

9.4.4 Characteristics associated with reported duty-paid tobacco and cigarette purchase prices

Table 9.3 shows the results of the regression analysis for price estimates for cigarettes and tobacco purchased from duty-paid sources and socio-demographic characteristics and tobacco dependence in 2007-8, 2010-11 and 2012. In 2007-8 gender, social status and tobacco dependence were significantly associated with price paid for cigarettes and RYO tobacco. Being male and with low social status was associated with reduced price estimates for cigarettes in 2007-8, whereas high tobacco dependence was associated with reduced price estimates for RYO tobacco.

Table 9.3: Association between price estimates for duty-paid cigarettes and tobacco and socio-demographic characteristics and tobacco dependence at all time points

	Cigarettes			RYO tobacco		
	β	95% CI	p value	β	95% CI	p value
2007-8						
Gender	0.13	0.20 – 0.55	p<0.001	-0.04	-0.23 – 0.12	p= 0.561
Age	-0.04	-0.09 – 0.02	p = 0.195	-0.001	-0.06 - 0.06	p = 0.984
Social status	-0.15	-0.24 - -0.10	p<0.001	0.07	-0.03 – 0.10	p = 0.273
Tobacco dependence	0.05	-0.01 – 0.11	p = 0.111	-0.24	-0.15 – -0.05	p<0.001
2010-11						
Gender	0.08	0.12 – 0.45	p = 0.001	-0.002	-0.15 – 0.15	p = 0.969
Age	0.02	-0.03 – 0.07	p = 0.346	-0.06	-0.08 – 0.02	p = 0.185
Social status	-0.11	-0.20 - -0.07	p<0.001	-0.04	-0.08 – 0.03	p = 0.384
Tobacco dependence	-0.13	-0.21 - -0.10	p<0.001	-0.07	-0.09 – 0.01	p = 0.129
2012						
Gender	0.12	0.28 – 0.60	p<0.001	-0.03	-0.18 – 0.07	p = 0.393
Age	-0.01	-0.06 – 0.03	p = 0.532	-0.07	-0.08 - -0.001	p = 0.047
Social status	-0.10	-0.19 - -0.07	p<0.001	-0.01	-0.06 – 0.04	p = 0.738
Tobacco dependence	-0.13	-0.21 - -0.11	p<0.001	-0.16	-0.14 - -0.05	p<0.001

Note: RYO = 'roll your own'; CI = Confidence Interval; β = beta

Increases in age and tobacco dependence were associated with reduced price

estimates for cigarettes in 2007-8. Price estimates for RYO tobacco were not associated with age, social status and gender in 2007-8. In 2010-11 and 2012, being male, with low social status and high tobacco dependence were associated with lower price estimates for cigarettes (Table 9.4). No associations were found between price estimates for RYO tobacco and age, gender, social status and tobacco dependence in 2010-11. However, in 2012 increases in tobacco dependence and age were significantly associated with lower price estimates for RYO tobacco.

9.5 Discussion

Price estimates for cigarettes and RYO tobacco for smokers who reported exclusive duty-paid purchases was highest at all time points, and these increased over time. Conversely, those who purchased cigarettes and RYO tobacco exclusively from illicit sources paid the least at all times, though these prices also increased over time. Duty-paid cigarette purchases from vending machines at pubs were the most expensive at all time points; the internet was the cheapest source in 2007-8 and 2012, while purchases abroad were the cheapest in 2010-11. It appears that exclusive duty-paid purchase of RYO tobacco was most expensive when purchased from the supermarkets in 2007-8, vending machines in a pub in 2010-11 and from the internet in 2012. The most inexpensive source of duty-paid roll-ups was the cash-and-carry in 2007-8, the internet in 2010-11 and from behind the bar in pubs in 2012. At all time points, the most expensive source of illicit cigarettes was persons in pubs, whereas the cheapest source was friends at all time points. Illicit RYO tobacco purchases from persons in pubs were also the priciest at all time points. The most inexpensive source of illicit RYO tobacco was persons in the local area known to sell cheap tobacco in 2007-8, and street sellers in 2010-11 and 2012. Being

male, with low social status and high tobacco dependence appear to be associated with reduced price estimates for cigarettes and RYO tobacco. In 2012 this included being an older smoker, but only for RYO tobacco price estimates.

Price estimates for duty-paid cigarettes and RYO tobacco increased over time after adjusting for inflation, indicating that tax increases were accompanied by increases in prices. The price estimates for duty-paid cigarettes in the current study were less than the recommended retail price of duty-paid cigarettes in the most popular price category at all time points (£5.44 in 2008, £6.63 in 2011 and £7.09 in 2012 - TMA, 2012). There are a few possible reasons for this. Firstly, our methodology for estimating the price of cigarettes could be subject to recall bias and under-reporting of tobacco consumption (Gallus et al., 2011) both of which would have impacted on the derived price estimates. Secondly, it is possible that smokers in the study samples purchased more ‘budget’ brand cigarettes than ‘premium’ brands; either as a result of financial constraints caused by the economic downturn, personal preference or due to the POS ban just asking for the cheapest. This would have biased the samples and resulted in lower price estimates, this was not accounted for in this study. Future research into the tobacco and cigarette brands purchased by smokers should assess whether more smokers are downgrading from mid-range and premium brands to budget brand tobacco products in order to mitigate the effects of tax increases. This would have significant implications for tobacco control policy, as it would raise the question of whether the tobacco industry should be restricted from offering smokers a cheaper range of tobacco products. As previously mentioned, when faced with high cigarette prices, smokers can potentially control their cigarette expenditure by seeking cheaper cigarettes

(White et al., 2013). Smokers should be informed that, whereas price-minimizing strategies appear to save money, cutting consumption could save even more. If smokers are made aware of how much they save by reducing their tobacco consumption and are educated in effective ways of achieving this (National Institute for Health and Care Excellence (NICE), 2013), further substantial tax increases could offset the effect of the illicit market. This is significant, and highlights the scope for further tax increases on tobacco products, however if this is to be implemented it is imperative that it is accompanied by effective anti-illicit tobacco trade strategies. Lastly, potentially categorising some illicit tobacco purchases as duty-paid by not accounting for ‘under the counter’ purchases in off licences (see Chapter 8) may have also resulted in lower price estimates for duty-paid cigarettes.

Price estimates for illicit cigarettes and RYO tobacco also increased over time, but not consistently over the different sources of purchase. This suggests that although illicit tobacco products may not be subject to tax increases, costs incurred during their acquirement and distribution (increases in fuel costs, counterfeiting materials, etc.) may be reflected in the price of these products i.e. increases in fuel costs, counterfeiting materials etc. Furthermore, it is important to note that the increase in the illicit tobacco products was greater than that of duty-paid cigarettes resulting in a smaller difference between the two. A possible explanation for this could be that more smokers are purchasing low price range duty-paid cigarettes, which the tobacco industry have been suspected of keeping low in periods of tax increases (Gilmore et al., 2013), thereby reducing the gap between illicit and duty-paid prices.

In the current study smokers who purchased cigarettes exclusively from illicit

sources appeared to pay 31% less in 2007-8, 31% less in 2010-11, and 7% less in 2012 than those who purchased cigarettes exclusively from duty-paid sources. Likewise, smokers who purchased RYO tobacco exclusively from illicit sources paid 4.5% less in 2007-8, 16% less in 2010-11 and 10% less in 2012 compared to exclusive duty-paid purchases. This finding supports the argument that illicit tobacco use is driven by price (Pellegrini et al., 2011). In addition, the low price of illicit tobacco provides a huge incentive for smokers to resort to cheap tobacco rather than reduce their consumption when faced with increased prices. Compared to the most expensive 20 pack of cigarettes in supermarkets, smokers' direct reports of price paid for illicit cigarettes was 57% less in 2007-8 and 58% less in 2010-11. Price estimates for illicit cigarettes derived from weekly cigarette consumption and expenditure, as well as direct reports from smokers of price paid for illicit cigarettes in 2007-8 and 2010-11 did not differ greatly. This affirms to some extent the methodology used to estimate prices in the current study.

There was some variation in the average price paid for illicit and duty-paid cigarettes and tobacco depending on the source used. Vending machines in pubs were the most expensive source of duty-paid cigarettes at all three time points. The internet was the cheapest source of duty-paid cigarettes in 2007-8 and 2012. This is possibly because internet sellers advertise low prices for cigarettes and tobacco which tend to be untaxed or discounted (Hyland et al. 2005). Therefore, purchases from the internet could be viewed as a means of tobacco tax avoidance, as are purchases made abroad. The price estimates for duty-paid cigarettes and RYO tobacco purchases increased or decreased with time, according to sources of purchase. Notably, the price of duty-paid RYO tobacco appeared to decrease in 2012 when purchased from cash and carry,

behind the bar in a pub, vending machine in a pub and purchases abroad. Due to the large illicit RYO tobacco market (38% according to 2010-11 estimates from HMRC (2011c)), it is possible that some duty-paid RYO tobacco products might have been counterfeit. Similarly, the price of illicit RYO decreased in 2012 when purchased from a person in the pub, persons in the local area and friends, but increased in purchases from street sellers. It is possible therefore that overall price estimates show a different pattern because of the skew in terms of the number of smokers using the different routes of tobacco and cigarette purchase. On the other hand, it should be acknowledged that the price of illicit tobacco products may just vary according to the source, the brand purchased, and the perceived quality of the cigarettes (Joossens et al., 2010) all of which could have impacted on the overall price estimates.

This study also identified differences in the price estimates for illicit cigarettes and RYO tobacco according to source of purchase also. Firstly, this could simply have been down to the type of illicit tobacco bought at these sources. For instance, counterfeit tobacco and cigarettes may be sold at a much cheaper price (as smokers may be prepared to pay much less for counterfeit tobacco due to its presumed low quality) compared to bootlegged or smuggled tobacco. This is supported by the finding in the current study that the most inexpensive source of illicit RYO in 2010-11 and 2012 were street sellers; who according to the interview study are known to sell counterfeit tobacco products (see Chapter 7, section 7.4.3.3). Secondly, the variation in prices by illicit source could be as a result of possible discounts offered by the illicit sellers when products are purchased in bulk. This was alluded to in interviews with smokers who regularly purchased illicit tobacco (see Chapter 7, section 7.4.5.2). This may be compounded by discount offers being given to smokers deemed to be

‘customers’ or ‘friends’, as noted in the finding that friends were the cheapest source of illicit cigarettes at all time points (although not considerably less than street sellers in 2012). Persons in pubs being the most expensive source of illicit cigarettes and RYO tobacco at all time points is unsurprising as these purchases may have been opportunistic, so when approached with cheaper tobacco products smokers would be willing to pay the price quoted.

Being male was associated with reduced price estimates for cigarettes and RYO tobacco purchased from duty-paid sources. A possible explanation for this is that men appear more likely to purchase illicit tobacco as indicated by the previous survey (see Chapter 6, Section 6.4.3, Table 6.5), suggesting that they are more likely than females to engage in price minimising strategies. In addition, it is possible that they are also more likely to seek out cheaper sources of tobacco products than females are. Having low social status was also significantly associated with reduced price estimates for cigarettes and RYO tobacco. This in line with evidence that smokers with low social status are more likely to engage in price minimising behaviours (Cummings et al., 1997; Hyland et al., 2005; Li et al., 2010). This is not surprising as smokers with low social status are more likely to be enticed by cheaper prices due to the potential for financial savings. Moreover, lower SES groups have higher smoking rates, are also more dependent and less likely to quit (Barnett et al., 2009; Fidler et al., 2008; Kotz and West, 2009). High tobacco dependence was also associated with reduced price estimates for cigarettes and RYO tobacco. This finding is consistent with other studies which indicate that smokers with high tobacco dependence are more likely to engage in price minimising strategies (Cummings et al., 1997; Hyland et al., 2005; Li et al., 2010). Smokers with high tobacco dependence are more likely to seek out cheaper

tobacco products as a means of reducing their tobacco expenditure without having to reduce their tobacco consumption, thereby lessening the effect of tax increases. These associated characteristics are similar to those of smokers who report illicit tobacco purchase (Chapter 6, Section 6.4.3, Table 6.5), indicating that although these smokers may not report illicit tobacco use presently are engaging in price minimising strategies such as tax avoidance. Consequently, there is a possibility that they may switch to illicit tobacco when faced with further tax increases. There is clearly a need for tobacco control policies to address this, possibly through targeted campaigns aimed at these sub groups.

This study had a number of potential limitations. The first of these was the use of self-reported tobacco consumption and expenditure to measure the average price paid for tobacco and cigarettes - both of which were subject to recall bias and relied on participants to respond accurately. Furthermore, there are theoretical implications of using unit values as a proxy for price as unit values are household-specific, subject to sample selection and thus may produce biased results (Nelson, 1991). However, this is a methodology often used by researchers (Stewart and Dong, 2011) and a comparison of price estimates and direct reports from smokers on price did not differ considerably. Secondly, a significant number of price estimates were excluded as they fell above the most expensive premium brand cigarettes and tobacco or below the cheapest illicit tobacco price. This would undoubtedly have impacted on the final estimates derived for cigarettes and RYO tobacco. However, this was deemed the most appropriate way to address outliers as other conventional methods for detecting outliers either require an assumed normal distribution or require a mean or standard deviation parameter to be estimated, both of which are greatly influenced by outliers. A third limitation was that smokers in our sample may have purchased more 'budget' brand cigarettes than 'premium'

brands; this was not accounted for in this study and could have resulted in lower tobacco and cigarette price estimates. Future research should investigate the extent of purchase of budget, mid-range and premium priced tobacco products. Fourthly, potentially categorising some illicit tobacco purchases as duty-paid by not accounting for ‘under the counter’ purchases in ‘off licenses’ in the 2007-8 and 2010-11 surveys may have also resulted in lower price estimates for duty-paid cigarettes. Finally, as with previous studies smokers may have been reluctant to report purchase of cheap ‘illicit’ cigarettes and tobacco in a face-to-face survey, however this is unlikely as the purchase of illicit tobacco is currently not illegal in the UK.

9.6 Conclusion

Smokers who purchased cigarettes and RYO tobacco exclusively from duty-paid sources paid the most for these tobacco products at all three time points assessed; whereas exclusive illicit tobacco buyers paid the least for cigarettes and RYO tobacco at all times. This finding supports the argument that illicit tobacco use is motivated by price. Price estimates for both duty-paid and illicit cigarettes and RYO tobacco also increased over time. Price estimates for duty-paid and illicit cigarettes and tobacco varied according to sources of purchase. Potentially, more smokers may be switching their premium brand cigarettes and tobacco for budget or mid-range brands as reflected by the duty-paid price estimates in the current study. Future research should investigate the extent to which this switch is occurring to determine the level of price minimising behaviours in light of tobacco tax increases. Moreover, males, smokers from low socio-economic groups and high tobacco dependence appear to be associated with lower price estimates for duty-paid cigarettes and tobacco. This finding lends support to the conclusion that these sub groups are most likely

engaging in price minimising strategies. . In the attempt to reduce smoking prevalence by increases in cigarette and tobacco prices, it is essential that smokers' purchasing behaviours to mitigate this policy (using price minimising strategies) are well understood so effective measures can be implemented to reduce their impact.

CHAPTER 10

THE ASSOCIATION BETWEEN ILLICIT TOBACCO USE AND MOTIVATION TO QUIT AND PAST QUIT ATTEMPT: A NATIONAL SURVEY OF ENGLISH SMOKERS

10.1 Introduction

It is established that the existence of illicit tobacco trade undermines tobacco control efforts. For instance, age of sale restrictions are undermined when young smokers are able to access cheap tobacco from unregulated sources (NEMS, 2011). In addition, the impact of graphic pictorial health warnings on cigarette and tobacco packs is diminished as some illicit tobacco products fail to have these warnings (see Chapter 7). Most notably, illicit tobacco trade undermines the effects high tobacco taxes to encourage smokers to quit. When faced with tobacco tax increases, although some smokers attempt to quit smoking or reduce the number of cigarettes smoked (Kengganpanich et al., 2009) others switch to cheaper brands or engage in other price minimising strategies to maintain their tobacco consumption (Cummings et al., 1997). Consequently, smokers' being able to access cheap tobacco from multiple sources extenuates the impact of tax increases on promoting smoking cessation. Smokers who report illicit tobacco purchase have candidly acknowledged that availability of cheap tobacco made it possible to smoke when they could not afford to otherwise (Wiltshire et al., 2001, NEMS, 2009) (also see Chapter 7). This causes one to postulate that smokers who are able to access cheap tobacco may be less motivated to quit smoking and less likely to make a quit attempt. However, economic analysis estimates that even when smuggling is possible, cigarette taxes generally raise the marginal producer's cost which causes cigarette prices to increase and smoking to decline

(Merriman, 2002). Therefore it is supposed that smuggling does not reduce the public health benefits of cigarette taxes (Merriman, 2002). There is some evidence to suggest that accessibility to a source of low-taxed or untaxed cigarettes reduces the likelihood that a smoker will make a quit attempt and successfully quit smoking (Hyland et al., 2005, Hyland et al., 2006). Similarly, recent purchase of illicit tobacco has been associated with having no plans to quit smoking (Luk et al., 2009). Similarly, it has been observed that smokers who engage in any price/tax avoidance behaviours were 24% less likely to report quit attempts (Licht et al., 2011). Furthermore, there is evidence that smokers who used at least one price minimising strategy were less likely to attempt to quit smoking or cut back on cigarette consumption (Choi et al., 2012).

Previous studies focused on the impact of low-taxed or discount tobacco purchases on smoking cessation; however the current study reported in this chapter concentrated solely on illicit tobacco (illegally sold tobacco products that were smuggled, bootlegged or counterfeited). This allowed for the examination of the impact of accessing cheap tobacco and illicit tobacco trade on smoking cessation. In contrast to previous studies which measured smoking cessation outcomes with quit attempts and intention to quit, the current study assessed motivation to quit. Assessing motivation to stop smoking includes elements of beliefs about what one should do, desire and intention to act in a particular way (West, 2006). This was a useful measure for the current study because smokers are unlikely to engage in smoking cessation strategies if they are not motivated to quit smoking. Moreover, measures of motivation to stop have been found highly predictive of quit attempts (Vangeli et al., 2011). The motivation to stop scale (MTSS) was developed for use in large surveys by

Robert West in collaboration with the Department of Health and the Central Office of Information (Kotz et al., 2013). It effectively combines both current desire and intention to stop smoking, both of which are key components of motivation (Smit et al., 2011) into one single response scale. In addition, it provides an ordinal measure of motivation to stop smoking which allows for assessment of all the relevant aspects of motivation. A measure of the predictive validity of the MTSS found that it effectively predicted quit attempts in the following six months in a linear fashion, with those at the top of the scale being 6.8 times more likely to try to quit than those at the bottom (Kotz et al., 2013). Therefore, the MTSS is a useful scale for predicting whether illicit tobacco users will make an attempt to quit smoking in the future.

In the UK as of 2010-11, 9% of the cigarette market and 38% of the tobacco market was made up of illicit products (HMRC, 2012b), yet the impact of this trade on smoking cessation has not been explored in a nationally representative survey. If the UK government's target of 210,000 (18.5%) fewer adult smokers by 2015 (Department of Health (DH), 2011) is to be achieved, it is crucial that the impact of illicit tobacco trade on smoking cessation is examined. Consequently, the current study sought to do this by assessing whether illicit tobacco use was associated with reduced motivation to quit and not making a past quit attempt and few studies have examined the impact of illicit tobacco trade on smoking cessation in a nationally representative sample.

10.2 Study aims

The aim of this study was to assess whether reported use of illicit tobacco was associated with motivation to quit smoking and having made a quit attempt in the past year. The current study had the following objectives:

1. Determine whether illicit tobacco purchase was associated with lower levels of motivation to quit compared with duty-paid tobacco purchase.
2. Determine whether there was an association between illicit tobacco use and having made a quit attempt in the past year.

10.3 Methods

10.3.1 Study design and sampling

The current study combined data from three surveys collected through the Smoking Toolkit Study in December 2007 and March to May 2008, December 2010 to May 2011 and May to December 2012. There is a cost to adding questions to the STS and in 2008 this was funded by the charity Action on Smoking and Health (ASH), however budget constraints prevented data collection in January and February 2008. In 2010-11 and 2012 data collection was funded by Cancer Research UK and so these budget constraints were not present. It was important that data be collected during these months in order to capture any effects of New Year and the lead up to annual budget on smokers' purchasing behaviour. In May 2012, funding was granted by Cancer Research UK to keep the illicit tobacco questions in the STS for an unspecified period of time. The combined sample (n=7588) was used to assess the association between illicit tobacco use and past quit attempt. However, the question on motivation to quit smoking was not included in the STS until November 2008 and so only data from 2010-11 and 2012 (n = 5993) were included in assessing motivation to quit.

Survey participants were drawn from aggregated output areas (containing 300 households). These areas were stratified by ACORN (A Classification of Residential Neighbourhoods) characteristics (an established geo-demographic analysis of the population (<http://www.caci.co.uk/acorn/acornmap.asp>)) and region, and the randomly selected to be included in an interviewer's list. This approach to profiling ensures an appropriate mix of areas by socio-economic group.

10.3.2 Measures

Participants were eligible for inclusion in the current study if classified as current smokers. This was assessed by asking participants: 'Which of the following best applies to you? – I smoke cigarettes (including hand-rolled) every day; I smoke cigarettes (including hand-rolled), but not every day; I do not smoke cigarettes at all, but I do smoke tobacco of some kind (for example:- pipe or cigar); I have stopped smoking completely in the last year; I stopped smoking completely more than a year ago; I have never been a smoker (i.e. smoked for a year or more); Don't Know. Those who reported smoking cigarettes (including hand-rolled) every day or smoked but not every day were categorised as current smokers and included in the study. Data on demographic characteristics including gender, age, socio-economic status and smoking characteristics were collected through the STS questionnaire. The social status categories were as follows: AB = higher and intermediate professional/managerial, C1 = supervisory, clerical, junior managerial administrative/ professional, C2 = skilled manual workers, D = semi-skilled and unskilled manual workers and E = on state benefit, unemployed, lowest grade workers. The Heaviness of Smoking Index (HS1) was used as a measure of tobacco dependence (Kozlowski et al., 1994).

The primary outcome measure was motivation to quit. To assess motivation the Motivation to Stop Scale (MTSS) was used with smokers being asked: “Which of the following describes you?”. The response categories and coding were as follows: (1) “I don’t want to stop smoking”; (2) “I think I should stop smoking but don’t really want to”; (3) “I want to stop smoking but haven’t thought about when”; (4) “I REALLY want to stop smoking but I don’t know when I will”; (5) “I want to stop smoking and hope to soon”; (6) “I REALLY want to stop smoking and intend to in the next 3 months”; (7) “I REALLY want to stop smoking and intend to in the next month”. This was used to derive a mean motivation score. Those who responded ‘Don’t know’ were categorised as missing in the analyses (n=46). The secondary outcome measure was having made a quit attempt in the past year. Participants past quit attempts were assessed by asking: ‘How many serious attempts to stop smoking have you made in the last 12 months’? Those reporting one or more quit attempts were categorised as having made a quit attempt in the past year.

Illicit tobacco purchase was assessed by asking participants: ‘In the last 6 months, have you bought any cigarettes or hand rolled tobacco from any of the following?: newsagent\off licence\corner shop, petrol garage shop, supermarket, cash and carry, internet, pub (behind the bar), pub (vending machine), pub (somebody who comes round selling cigarettes cheap), people who sell cheap cigarettes on the street, people in the local area who are a ready supply of cheap cigarettes, buy them cheap from friends, buy them from abroad and bring them back with me, Other, have not bought any in the last 6 months and don’t know. Participants who reported purchasing cheap tobacco

from individuals that sell cheap cigarettes in the pubs, those that sell cheap cigarettes on the street, persons that are trusted sources of cheap cigarettes in the local area and buying cheap cigarettes from friends were categorised as purchasing illicit tobacco. In 2012 this included the category 'newsagents\off-licences\corner shop - under the counter'. It is important to note that due to the addition of this new category in 2012, it is not possible to make direct comparisons (in terms of key findings such as illicit tobacco prevalence) between the follow-up survey and the surveys conducted in 2007-8 and 2010-11. Participants' purchasing behaviours were classified into 3 groups (duty-paid (DP) only, DP and illicit tobacco and illicit tobacco only). Participants who responded 'none', 'don't know' or 'other' (mostly repetitions of answers already given or not clear) to the question on source of tobacco purchase were excluded from the current study (n=43 in 2007-8; n=120 in 2010-11 and n = 59 in 2012).

10.3.3 Statistical analysis

Multinomial logistic regression analysis was used to assess associations between illicit tobacco use and motivation to quit and past quit attempt. Motivation to stop and tobacco dependence are often related to each other as heavy smokers may show low motivation because they lack confidence in their ability to quit and lighter smokers may show low motivation because they believe they can stop when they wish (West, 2004). In addition men and those from lower social grades are more likely to report illicit tobacco use (Chapter 6) and less likely to quit smoking (Fidler et al., 2013). Hence, logistic regression analysis was undertaken with and without adjustment for the aforementioned confounders.

The assumption of ‘normality’ required for ANOVA analysis was assessed using the Kolmogorov-Smirnov (K-S) statistic. Cigarette consumption and MTSS scores were found to be statistically non – normal among those reporting purchases from DP sources only, illicit sources only and DP and illicit sources. Kruskal-Wallis tests were therefore adopted to assess differences in cigarette consumption and motivation to quit score by source of tobacco purchase. Chi-squared analysis was used to test group differences for categorical variables. Statistical significance was set at $p < 0.05$.

10.3.4 Ethical approval

Ethical approval was granted by the University College London Research Ethics Committee.

10.4 Results

Between December 2007 and March to May 2007-8, December 2010 to May 2011 and May to December 2012 33,426 adults were surveyed, of whom 7,588 were current smokers (22.7%). Thirteen percent ($n=885$; 95% Confidence Interval (CI) 12.3 – 13.9) reported any illicit tobacco or cigarette purchase. Four percent ($n=273$; CI 3.5 – 4.5) reported exclusive illicit tobacco purchase, 9% ($n=611$; CI 8.3 – 9.7) reported both illicit and DP illicit tobacco purchases and 86.9% ($n=5892$; CI 86.1 – 87.7) reported duty-paid purchases only. Table 10.1 shows the socio-demographic and smoking characteristics of participants split according to source of tobacco purchases. Exclusive illicit tobacco purchases were most likely reported by smokers in the 35-54 age group, whereas reports of both duty-paid and illicit tobacco purchases were more likely in the 24 – 44 age group ($\chi^2 = 68.62$ (df (degrees of freedom) 10); $p < 0.001$). More male smokers reported exclusive illicit tobacco purchases than

female smokers ($\chi^2 = 40.95$ (df 2); $p < 0.001$). Social status ($\chi^2 = 49.84$ (df 8); $p < 0.001$), cigarette consumption per day ($\chi^2 = 56.05$ (df 2); $p < 0.001$) and type of tobacco smoked ($\chi^2 = 190.96$ (df 4); $p < 0.001$) varied significantly as a function of source of tobacco purchase (Table 10.1).

Table 10.1: Socio-demographic and smoking characteristics as a function of type of tobacco and cigarette purchase in England

Characteristics	Tobacco/Cigarette purchase source				p Value
	Total (n=6,776)	Illicit only 4% (n=273)	Duty paid and illicit 9% (n=611)	Duty paid only 87% (n=5892)	
Age, (years) % (n)					p<0.001
16-24	19.0 (1288)	14.3 (39)	27.0 (165)	18.4 (1084)	
25-34	19.8 (1340)	16.5 (45)	19.3 (118)	20.0 (1177)	
35-44	20.8 (1408)	21.6 (59)	22.7 (139)	20.5 (1210)	
45-54	17.8 (1206)	21.2 (58)	18.8 (115)	17.5 (1033)	
55-64	12.7 (862)	15.0 (41)	9.0 (55)	13.0 (766)	
65+	9.9 (673)	11.4 (31)	3.3 (20)	10.6 (622)	
Gender, % (n)					p<0.001
Male	53.3 (3614)	63.4 (173)	63.3 (387)	51.8 (3054)	
Female	46.7 (3162)	36.6 (100)	36.7 (224)	48.2 (2838)	
Social status, % (n)					p<0.001
AB	15.2 (1033)	9.2 (25)	10.9 (67)	16.0 (941)	
C1	25.1 (1700)	15.4 (42)	23.9 (146)	25.7 (1512)	
C2	25.1 (1703)	27.5 (75)	29.1 (178)	24.6 (1450)	
D	20.8 (1412)	27.1 (74)	22.5 (138)	20.4 (1200)	
E	13.7 (929)	20.9 (57)	13.6 (83)	13.4 (789)	
Type of Tobacco smoked, % (N)					p<0.001
Cigarettes	59.6(3457)	31.5(74)	46.2(258)	62.4(3125)	
Cigarettes & RYO	7.1(414)	5.1(12)	15.6(87)	6.3(315)	
RYO only	33.2(1928)	63.4(149)	38.2(213)	31.3(1566)	
Cigarettes per day (CPD), mean (sd)	12.5 (8.38)	13.8 (9.10)	14.5 (8.55)	12.2 (8.29)	p<0.001
Time to first cigarette,% (n)					p<0.001
>61 minutes	27.1 (1835)	27.0 (74)	21.6 (132)	27.7 (1629)	
31-60 minutes	22.0 (1494)	13.1 (36)	19.1 (117)	22.8 (1341)	
6-30 minutes	31.5 (2136)	35.4 (97)	34.5 (211)	31.0 (1828)	
<5 minutes	18.9 (1281)	24.1 (66)	24.2 (148)	18.1 (1067)	

Note: Data weighted to match the 2001 census; n = Number; sd = Standard Deviation; RYO = 'roll your own' tobacco; Social Status categories: AB = higher and intermediate professional/managerial, C1 = supervisory, clerical, junior managerial administrative/professional, C2 = skilled manual workers, D = semi-skilled and unskilled manual workers and E = on state benefit, unemployed, lowest grade workers

Smokers who reported exclusive use of illicit tobacco sources for tobacco purchases had a lower mean motivation score (3.0; SD = 1.90) compared with

those who reported use of both illicit and duty-paid sources (3.5; SD = 1.94) and those who used duty-paid sources exclusively (3.6; SD = 2.08) ($\chi^2 = 23.38$ ($df\ 2$); $p < 0.001$) (Table 10.2). Similarly, the proportion of exclusive illicit tobacco users reporting having made a quit attempt in the previous year was lower (26.6%, $n = 73$), compared to duty-paid and illicit tobacco users (35.9%, $n = 219$) and exclusive duty-paid tobacco users (31.6%, $n = 1858$) ($\chi^2 = 8.26$ ($df\ 2$); $p = 0.016$) (Table 10.2).

Table 10.2: Past quit attempt and motivation to quit as a function of reported sources of cigarette and RYO tobacco purchase

Characteristics	Tobacco/Cigarette purchase source				p Value
	Total ($n=6,776$)	Illicit only 4% ($n=273$)	Duty paid and illicit 9% ($n=611$)	Duty paid only 87% ($n=5892$)	
Made quit attempt, % (n)	31.7 (2150)	26.6 (73)	35.9 (219)	31.6 (1858)	$p = 0.016$
Motivation to quit, mean (SD)	3.6(2.07)	3.0(1.90)	3.5(1.94)	3.6 (2.08)	$p < 0.001$
Levels of motivation, % (n):					$p < 0.001$
1. 'I don't want to stop smoking'	25.5(1345)	37.3 (81)	22.3 (84)	25.2(1180)	
2. 'I think I should stop smoking but don't really want to'	12.6(662)	11.5 (25)	15.2 (57)	12.4 (580)	
3. 'I want to stop smoking but haven't thought about when'	8.9(471)	9.2 (20)	9.8 (37)	8.8 (414)	
4. 'I REALLY want to stop smoking but I don't know when I will'	17.1(899)	15.2 (33)	15.7 (59)	17.2 (807)	
5. 'I want to stop smoking and hope to soon'	14.9 (786)	16.6 (36)	21.3 (80)	14.3 (670)	
6. 'I REALLY want to stop smoking and intend to in the next 3 months'	9.5 (500)	6.0 (13)	7.4 (28)	9.8 (459)	
7. 'I REALLY want to stop smoking and intend to in the next month'	11.6 (609)	4.1 (9)	8.2 (31)	12.2 (569)	

Note: Data weighted to match the 2001 census; n = Number; sd = Standard Deviation

Smokers using illicit sources exclusively for tobacco purchase were more likely to report lower levels of motivation to quit compared with those reporting exclusive use of duty-paid sources in both adjusted and unadjusted models (Table 10.3). Similarly, those purchasing cigarettes and tobacco from both duty-paid and illicit tobacco sources reported lower levels of motivation to quit smoking, although this was only significant in the adjusted model (Table 10.3). There appeared to be no association between exclusive illicit tobacco purchase, duty-paid and illicit tobacco purchase and making a quit attempt in the past year.

Table 10.3: Association between any use of illicit tobacco and motivation to quit and having made a quit attempt in the previous year

	Unadjusted OR (95% CI)	p value	Adjusted OR ^a (95% CI)	p value
Motivation to quit Smoking				
Duty-paid only	<i>Reference</i>		<i>Reference</i>	
Duty-paid and illicit	0.95 (0.90 – 1.00)	0.058	0.94 (0.89 – 0.99)	0.033
Illicit only	0.86 (0.81 – 0.93)	p<0.001	0.87 (0.81 – 0.94)	p<0.001
Past quit attempt				
Duty-paid only	<i>Reference</i>		<i>Reference</i>	
Duty-paid and illicit	0.84 (0.66 – 1.06)	0.147	0.88 (0.69 – 1.12)	0.296
Illicit only	1.01 (0.74 – 1.38)	0.957	1.02 (0.74 – 1.41)	0.892

^aAdjusted for sex, age, socio-economic status and tobacco dependence; OR = Odds ratio

Table 10.4 shows the unadjusted odds ratio (OR) of exclusive illicit tobacco purchase and non-exclusive illicit tobacco purchase for the various levels of motivation. There was a strong association between exclusive illicit tobacco purchase and reporting no intention to quit smoking in the unadjusted model (OR = 3.59, p<0.001). However, there was no statistically significant association between those reporting use of both illicit and duty-paid sources and having no intention to quit smoking (Table 10.4).

Table 10.4: Odds ratio (OR) of illicit tobacco, duty-paid and illicit tobacco purchase for the various levels of motivation

	Illicit only OR (95% CI)	p value	Duty paid and illicit OR (95% CI)	p value
Levels of motivation				
1. 'I don't want to stop smoking'	3.59 (1.92 – 6.74)	p<0.001	1.41 (0.92 – 2.14)	p=0.111
2. 'I think I should stop smoking but don't really want to'	2.19 (1.09 – 4.40)	p=0.028	2.05 (1.32 – 3.18)	p=0.001
3. 'I want to stop smoking but haven't thought about when'	2.55 (1.24 – 5.23)	p=0.011	1.63 (1.00 – 2.64)	p=0.049
4. 'I REALLY want to stop smoking but I don't know when I will'	2.19 (1.13 – 4.22)	p=0.020	1.13 (0.73 – 1.76)	p=0.588
5. 'I want to stop smoking and hope to soon'	2.70 (1.41 – 5.18)	p=0.003	1.75(1.15 – 2.67)	p=0.009
6. 'I REALLY want to stop smoking and intend to in the next 3 months'	1.49 (0.69 – 3.21)	p=0.313	1.14 (0.69 – 1.87)	p=0.610
7. 'I REALLY want to stop smoking and intend to in the next month'	<i>Reference</i>		<i>Reference</i>	

Note: CI = Confidence interval

The odd ratios were similar after adjusting for socio-demographic factors (age, gender and socio-economic status) and tobacco dependence (Table 10.5).

Table 10.5: Adjusted odds ratio (^aOR) of illicit tobacco, duty-paid and illicit tobacco purchase for the various levels of motivation

	Illicit only ^a OR (95% CI)	p value	Duty paid and illicit ^a OR (95% CI)	p value
Levels of motivation				
1. 'I don't want to stop smoking'	3.47 (1.80 – 6.70)	p<0.001	1.50 (0.97 – 2.31)	p=0.067
2. 'I think I should stop smoking but don't really want to'	2.08 (1.00 – 4.33)	p=0.050	2.19 (1.40 – 3.42)	p=0.001
3. 'I want to stop smoking but haven't thought about when'	2.78 (1.33 – 5.82)	p=0.007	1.62 (0.99 – 2.66)	p=0.055
4. 'I REALLY want to stop smoking but I don't know when I will'	2.22 (1.12 – 4.40)	p=0.022	1.15 (0.73 – 1.80)	p=0.552

5. 'I want to stop smoking and hope to soon'	2.80 (1.42 – 5.52)	p=0.003	1.82 (1.18 – 2.80)	p=0.007
6. 'I REALLY want to stop smoking and intend to in the next 3 months'	1.48 (0.67 – 3.30)	p=0.335	1.21 (0.73 – 2.00)	p=0.464
7. 'I REALLY want to stop smoking and intend to in the next month'	<i>Reference</i>		<i>Reference</i>	

^aAdjusted for sex, age, socio-economic status, tobacco dependence and past quit attempt, OR = Odds ratio; CI = Confidence interval

Smokers who reported exclusive and non-exclusive illicit tobacco purchase were more likely to have lower MTSS scores when compared to those reporting exclusive duty-paid tobacco purchase (Table 10.4 and 10.5).

10.5 Discussion

There was a negative association between exclusive purchase of illicit tobacco and motivation to quit in both adjusted and unadjusted models. Use of both duty-paid and illicit sources for tobacco purchase was significantly associated with motivation to quit smoking only in the adjusted model. Smokers who reported exclusive purchase of illicit tobacco had 3.6 times the odds of not wanting to quit smoking compared with exclusive duty-paid tobacco users. There was no significant association between use of both duty-paid and illicit sources and reluctance to quit smoking in adjusted and unadjusted models. However, smokers in this sub-group had 2.1 times the odds of thinking they should quit smoking but not really wanting to. In general, exclusive and nonexclusive purchase of illicit tobacco was associated with higher odds of being towards the bottom of the MTSS. Unlike previous studies the current study found no association between illicit tobacco purchase and having made a past quit attempt.

As intentions are an important predictor for behaviour change, it is likely that

illicit tobacco users were less motivated to stop smoking because they are able to access cheap tobacco which undermines the financial stimulus to quit. This is supported by the finding in the current study that smokers who used both duty-paid and illicit sources (most likely opportunistic buyers of illicit tobacco) showed lower odds of reduced motivation to quit compared with exclusive illicit tobacco users. This is possibly because being unable to access cheap tobacco all the time means they do not successfully mitigate the effect of tobacco tax increases. However, it is important to note that motivation to quit smoking varies with time and can be strongly influenced by the immediate environment (West, 2004). In addition, the transtheoretical model of behaviour stage (also known as the stages of change model) states that individuals with chronic behaviour patterns can be characterised as being at different stages of behaviour change and can move between different stages. In the case of smoking, individuals can be characterised into five stages of motivation: precontemplation (not wishing to stop), contemplation (thinking about stopping but not in the near future), preparation (planning to stop in the near future), action (trying to stop), and maintenance (have stopped for some time) (Prochaska and Velicer, 1997; West, 2004). It is supposed that smokers may cycle through the contemplation to action stages many times before stopping for good (West, 2004), thus it is possible that illicit tobacco users may have been close to quitting smoking. Nonetheless, an effective approach to tackling illicit tobacco trade cannot focus solely on tackling supply through increased enforcement (although this is warranted) but also demand by targeting illicit tobacco users with specialised smoking cessation strategies to increase quit rates and reduce smoking prevalence.

Surprisingly, use of illicit tobacco did not appear to negate the making of quit

attempts despite a negative association with motivation to stop. This is in contrast to findings from previous studies which found a negative correlation between access to cheap tobacco and making of quit attempts (Hyland et al., 2005; Hyland et al., 2006; Mecredy et al., 2013; Licht et al., 2011). A possible explanation for this finding in the current study is that smokers' may have been engaging in illicit tobacco purchase for some time, during which they could have made attempts to quit smoking albeit unsuccessfully. However, it is important to acknowledge that there are other factors such as desire to quit, beliefs about the damaging health effects of smoking and the perception that a smokers' partner wanted them to stop which predict the making of a quit attempt (West et al., 2001). Nonetheless, the finding that illicit tobacco use did not inhibit smokers from making a quit attempt is a significant finding.

Like previous studies, a number of limitations need to be considered in the current study. Firstly, this study includes cross-sectional data which limits the conclusions that can be drawn in relation to the association between illicit tobacco use and motivation to quit and past quit attempts. Secondly, this study relied on participants' recall of tobacco purchasing in the previous six months and retrospective self-report of quit attempts made over a 12 month period both of which are bound to recall bias. Nonetheless, this study established a significant association between illicit tobacco use and reduced motivation to quit smoking which has significant implications for smoking cessation efforts in England. Future research in the form of a prospective cohort study could build on the findings of the current study by determining whether illicit tobacco use is associated with success of quit attempts or likelihood of relapse, controlling for all other factors.

10.6 Conclusion

Illicit tobacco use appeared to be associated with reduced motivation to quit smoking. This finding provides support for the argument that illicit tobacco weakens the impact of tobacco tax increases on encouraging smokers to quit smoking. Further research is warranted to determine whether illicit tobacco users being less motivated to quit smoking is down to the availability of illicit tobacco, being able to obtain it at a cheap price or smokers' social circles. Interestingly, reports of any illicit tobacco use were not related to making a past quit attempt, indicating that illicit tobacco use did not discourage quit attempts, but may impact on the success of quit attempts. In order to promote successful smoking cessation in smokers reporting illicit tobacco use, limiting the accessibility to illicit tobacco as well as more targeted smoking cessation interventions is recommended.

CHAPTER 11

GENERAL DISCUSSION

The work presented in this thesis reports on the nature and extent of illicit tobacco trade in England. This final chapter begins by summarising the main findings from the six studies reported in the thesis. Policy implications and indications for future research are then discussed in light of the results from these studies.

11.1 Summary of the Findings

The objectives of the current thesis were as follows:

1. To assess the involvement and expectations of key stakeholders in a unique cross-agency Programme aimed at tackling the supply and demand for illicit tobacco in the North of England.
2. To determine the prevalence of illicit tobacco use, sources of purchase, proportion of smokers' total tobacco consumption which is illicit, and beliefs on the provenance of illicit tobacco in England in 2007-8 and 2010-11 and a follow-up in 2012.
3. To identify those most likely to report purchase and use of illicit tobacco, by assessing the association with:
 - i. Age
 - ii. Gender
 - iii. Socio-economic status
 - iv. Tobacco dependence
4. To determine smokers' understanding, beliefs and views on the illicit tobacco trade.
5. To investigate price paid for duty-paid and illicit tobacco and cigarettes

in England.

6. To determine whether smokers who report illicit tobacco use are less likely to engage in smoking cessation, by assessing the association with:
 - i. Motivation to quit
 - ii. Past quit attempt

Objective 1 arose as a result of an opportunity to work with the North of England Tackling Illicit Tobacco for Better Health Programme (a novel programme aimed at reducing the supply and demand for illicit tobacco in the North of England). This involved in-depth semi-structured interviews with key stakeholders in the Programme, in order to explore their involvement and expectations. The multi-agency partnership (involving organisations not used to working together) was viewed as having great potential to tackle the issues raised by illicit tobacco. Stakeholders tended to focus more on the supply of illicit tobacco and to a lesser extent demand. This reflected the stage of development of the Programme at the time of the interviews, as complex discussions were ongoing around intelligence sharing in relation to addressing sources of illicit tobacco supply (see Chapter 5). Stakeholders raised concerns about limited resources, the lack of trust at the time of the interviews between the different agencies, their different philosophies and ways of working, which could hinder further progress. Nevertheless, stakeholders expressed a strong commitment to making the partnership work and were striving to identify areas where their skills were complementary to enhance working relationships.

Objectives 2 and 3 were achieved using population based data from a representative sample of English smokers. Between 2007-8 and 2010-11, there

appeared to be a decline in reported purchase of illicit tobacco, but buying illicit tobacco cheap from friends remained the most popular source of illicit tobacco. Despite the overall drop in prevalence, it appeared that more smokers reported illicit tobacco making up more than three quarters of their tobacco consumption in 2010-11 compared to 2007-8. The majority of smokers believed that the illicit tobacco they purchased was cheap because they were duty free tobacco products purchased abroad, followed by the belief that they were smuggled and resold (see Chapter 6 and 8). Prevalence of illicit tobacco use appeared to increase between 2010-11 and 2012; however there was a decrease in 2012 compared to 2007-8. Most importantly, it was established that ‘under the counter’ purchases of illicit tobacco in shops was a prominent source of cheap tobacco (see chapter 8), an avenue that was not explored previously until identified through qualitative research (see below).

In 2007-8 smokers who reported illicit tobacco purchase were more likely male, young, with low social status, high tobacco dependence and a RYO smoker. Of interest is that as prevalence changed substantially between 2007-8 and 2010-11, so did the socio-demographic characteristics of those who purchased illicit tobacco. In 2010-11, only men and RYO smokers were significantly associated with illicit tobacco purchase (see Chapter 6). With the slight increase in prevalence of illicit tobacco use between 2010-11 and 2012, there appeared to be another shift in the characteristics associated with its use. Males, RYO smokers and those with high tobacco dependence were most likely to report any illicit tobacco purchase in 2012 (see Chapter 8). Interestingly, since 2007-8 socio-economic status and age appeared to no longer predict illicit tobacco purchase.

To achieve objective 4, a qualitative methodology was used involving semi-structured interviews. Smokers viewed the purchase of illicit tobacco as the norm, some likening this activity to the sale of pirate DVDs or illegal music downloads. Smokers reported easy access and availability of illicit tobacco. It appeared that smokers were able to purchase illicit tobacco ‘under the counter’ in newsagents, off licences and corner-shops and this was the most commonly used source. Smokers reported price as the main motivation for their illicit tobacco purchase. They viewed purchase of illicit tobacco as getting their cigarettes and tobacco at an affordable and bargain price. In addition, there was the sense of purchasing illicit tobacco as a means of ‘getting one over’ on the government for putting such high taxes on tobacco products. Of interest was the report by smokers that loss of access to illicit tobacco would drive them to think about quitting or cutting down on their smoking. Moreover, when smokers in the current thesis were asked to discuss what would prevent them from purchasing illicit tobacco, most reported the absence of illicit sellers. Smokers appeared not to be bothered by the legality or morality of purchasing illicit tobacco and were generally nonchalant about being seen as participating or encouraging an illegal activity in their community. Furthermore, when confronted with the claim that the illicit tobacco trade was connected to organised crime and has links to terrorism rings, this was received with some cynicism by smokers. Illicit tobacco sellers were viewed favourably, apart from street sellers who were perceived to be dishonest. This appeared to be because street sellers were known to sell counterfeit tobacco products which smokers considered to be poor quality, with adverse health effects (see Chapter 7).

Objective 6 was achieved by deriving price estimates of duty-paid and illicit

tobacco purchases using smokers' reports on their weekly cigarette and tobacco consumption and expenditure in 2007-8, 2010-11 and 2012. The average price per pack of 20 duty-paid cigarettes and 20 roll-ups increased between 2007-8 and 2012, although the price estimates derived were less than the recommended retail price of duty-paid cigarettes in the most popular price category at all time points. Smokers reporting exclusive purchase of illicit cigarettes and RYO tobacco appeared to pay the least for these tobacco products, compared to non exclusive illicit tobacco users and exclusive duty-paid tobacco users. There appeared to be some correlation between price paid for duty-paid cigarettes and tobacco and certain socio-demographic factors and tobacco dependence at all time points. Being male, with low social status and high tobacco dependence was associated with reduced price estimates for duty-paid cigarettes and RYO tobacco in 2007-8 and 2010-11. However, in 2012 older smokers were more likely to report reduced price estimates, but only for RYO tobacco (see chapter 9).

Finally, to achieve objective 7 data from a population based sample in 2007-8, 2010-11 and 2012 were used. There appeared to be a negative association between exclusive and non exclusive purchase of illicit tobacco and motivation to quit smoking. There was a strong association between reports of exclusive illicit tobacco purchase and having no desire to quit smoking. Similarly, there was a strong association between use of both duty-paid and illicit sources and thinking one should quit smoking but not really wanting to. Interestingly, there appeared to be no association between illicit tobacco purchases and having made a quit attempt in the last year (see Chapter 10).

11.2 Implications and Future Research

Estimating the size of the illicit tobacco market is inherently challenging, with methodological issues due largely to the illegal nature of this trade, but also because it involves three distinct types of activity: counterfeiting, smuggling and bootlegging. Nonetheless, it is important to monitor the trend in illicit tobacco purchase in individual countries in order to establish the scale of illicit tobacco use to inform policy decisions; as well as assess the effectiveness of anti-illicit tobacco strategies. The current thesis reported a dramatic decline in illicit tobacco purchase between 2007-8 and 2010-11 in England. The scale of decline however was much larger than indicated by data from other sources (HMRC, 2011; Klynveld Peat Marwick Goerdeler (KPMG), 2011 HMRC, 2012). This disparity could possibly have been due to the different methodologies used in these estimates and their limitations. HMRC estimates draw from a national survey of self-reported tobacco consumption and HMRC tax receipts on volume of tobacco products sold. The data becomes available a year after the survey period and for this reason estimates derived are not as timely as that produced by the current thesis. Furthermore, due to uncertainties in the data sets used to derive these estimates, it is not possible to produce a single point estimate of total consumption, hence an upper bound and lower bound for total consumption is derived (HMRC, 2010). The upper estimate of total consumption assumes that consumption per smoker has been constant over time, whereas the lower estimate makes the assumption that under-reporting of consumption per smoker is unchanged over time (HMRC, 2010). However, it is likely that neither of this is the case, which undoubtedly impacts on the estimates of illicit tobacco purchase produced by HMRC. The methodology used by KPMG to estimate illicit tobacco trade is unclear but appears to include an empty pack survey, global consumer tracking survey,

market sales, sales measurement at a retail level and computer aided personal and telephone interviewing (KPMG, 2011). The tobacco industry is likely to overestimate the size of the illicit tobacco market to support their argument for tax reductions (Joossens and Raw, 2011). In the current thesis there is the possibility of under-reporting by participants who do not want to be perceived as engaging in an activity seen as socially unacceptable, resulting in an underestimation of the illicit tobacco market. The complexity of illicit tobacco trade and aforementioned methodological limitations means it is difficult to produce accurate measures of illicit tobacco trade. The use of different approaches (comparison of tax paid sales and individually reported consumption measures and estimates of tobacco users' purchase behaviours, using both quantitative and qualitative methodologies) concurrently is therefore likely to establish a more accurate picture of the extent of illicit tobacco use. Furthermore, it is recommended that illicit tobacco purchase is routinely assessed through direct reports from smokers through quantitative and qualitative research methods so as to be able to explore changes in the illicit tobacco market such as emerging new sources of illicit tobacco. Moreover, in light of the WHO international illicit tobacco trade protocol, a common methodology for the estimation of illicit tobacco trade is necessary to accurately measure the effectiveness of this treaty in the future.

A cause for concern is that despite prevalence of illicit tobacco purchase decreasing between 2007-8 and 2010-11, more smokers reported illicit tobacco making up a larger proportion of their total tobacco consumption. This suggests that those who continue to purchase illicit tobacco may have become more reliant on this source of tobacco and are therefore not just opportunistic buyers. These smokers may also be more likely to seek out other cheap

tobacco sources if their usual sources are eliminated. Future research should explore the smoking behaviour of these smokers as it may be the case that the only way of preventing their illicit tobacco purchase is encouraging them to quit, thereby removing demand (see Chapter 7).

Of further concern is the finding that between 2010-11 and 2012 there appeared to be an increase in reports of illicit tobacco purchase in England. There is need to continuously monitor the trend in direct reports of illicit tobacco purchase by smokers to determine whether this was a chance occurrence or an indication of an upward trend in illicit tobacco use.

Exploring the sources used by smokers to access cheap tobacco products is also important since policies aimed at combating illicit tobacco trade focus mainly on eliminating these sources to curb supply. The majority of smokers who purchased illicit tobacco reported doing this through friends in 2007-8 and 2010-11. This suggests that social circles play an important role in this illegal trade by friends either being sellers themselves or providing information on places to access illicit tobacco (see Chapter 7).

The findings reported in this thesis also shed some light on the emergence of a new prominent source of illicit tobacco. Findings from the interview study with smokers (see Chapter 7) revealed ‘under the counter’ in shops as a source commonly used by smokers to obtain cheap tobacco in 2012¹. This is an important finding suggesting that although legitimate shopkeepers have been implicated in the illicit tobacco trade network (providing their premises as a place for street sellers to hide smuggled cigarettes from enforcement) (Antonopoulos, 2006) it appears that in recent years they have become fully

engaged in illicit sales. It is likely that they are enticed by the profits to be made from illicit tobacco sales, which they would otherwise be unable to make through duty-paid sales. This finding has significant implications as it may further promote the perception of illicit tobacco purchase being socially acceptable if smokers are able to access it through a legitimate retail shop, just as they would duty-paid tobacco. In addition, not accounting for this new source may have contributed to the underestimation of illicit tobacco use in 2010-11, thereby explaining the dramatic decline in illicit tobacco use observed between 2007-8 and 2010. Future research should further explore smokers' choice and use of different illicit tobacco sources as it is likely these might change in the future in the light of enforcement strategies.

Although more smokers reported use of certain sources (friends and under the counter) compared to others (street sellers, known sources in the community and pubs), it still stands that they were able to access multiple sources of illicit tobacco. Interestingly however, there was a move towards the use of single sources by smokers reporting exclusive and non-exclusive illicit tobacco purchase over time. This could possibly be as a result of the elimination of other sources making it more difficult to access illicit tobacco use. However, smokers in the interview study reported easy access and availability of illicit tobacco and so it may be that smokers stay loyal to reliable sources where their supply of cheap tobacco is guaranteed and they know the type of cheap tobacco that they are purchasing (legitimate products rather than counterfeit). Intensified and sustained enforcement activities could potentially eliminate popular sources of illicit tobacco and consequently drive smokers to duty-paid sources. Moreover, although approaches aimed at reducing demand for illicit tobacco could be effective in curbing its use, it appears that supply measures

may be more effective as most smokers in the interview study reported the absence of illicit tobacco sellers as grounds to discontinue illicit tobacco purchase. However, there is the possibility that they would seek out other sources of cheap tobacco products.

There was an established association between illicit tobacco purchase and being young, male, from low socio-economic groups, with high tobacco dependence and a RYO smoker. Of interest however is that, in addition to the prevalence of illicit tobacco use fluctuating over time, smokers most likely to report its use also appeared to change, although being male and a RYO smoker were both constant predictors. The finding that age no longer significantly predicted illicit tobacco use in the 2010-11 and 2012 surveys suggests that the argument that young smokers are most likely to engage in this price minimising behaviour no longer stands true. However, this thesis reports on smokers aged 16 and over and so it may be the case that younger smokers continue to report illicit tobacco purchase as is the case in the North of England (NEMS, 2011). This finding suggests that not only is the illicit market changing but smokers engaging in illicit tobacco purchase may also have changed over time. If the supply and demand of illicit tobacco is to be addressed effectively, continuous monitoring of sources of illicit tobacco and those drawn to its use is required for productive interventions to counter illicit tobacco trade. Times of financial hardship such as an economic recession may cause illicit markets to flourish (Arkes, 2011) and so illicit tobacco use may no longer be skewed towards certain groups as illustrated by the findings in the current thesis. This carries important implications for anti-illicit tobacco trade policies aimed at targeting smokers most likely to report illicit tobacco use and emphasises the need for continuous monitoring.

The majority of smokers in the cross-sectional surveys had the view that the illicit tobacco and cigarettes they purchased were cheap because the tobacco products were duty free brought in from abroad. This finding was consistent with that of the interview study (see Chapter 7), with many smokers believing that the tobacco products they purchased were legally manufactured products. This may have contributed to smokers' nonchalant approach to engaging in an illegal activity if the tobacco products purchased are believed to be legitimate. What can be taken from this finding is that many smokers appear not to purchase counterfeit tobacco and are in fact deterred by the unpleasantness of these products (see Chapter 7). Decreasing seizures of counterfeit tobacco and increasing seizures of non-UK illicit brands (cheap whites - tobacco products that are factory made and manufactured with the approval of a licensing authority for the sole purpose of being smuggled - HMRC, 2011) could mean cheap whites are replacing counterfeit tobacco in the illicit market. Future studies could explore this further by investigating the cigarette and tobacco brands purchased by illicit tobacco users. It is unsurprising that smokers did not believe illicit tobacco trade had connections to organised crime and terrorism, when illicit tobacco sellers were considered to be friendly and just trying to make a living. This suggests that smokers appear to view illicit tobacco trade as a small scale bootlegging operation or 'white van' trade rather than a large scale organised network. Addressing this misconception could potentially result in changing these smokers' purchasing behaviour; some programmes such as the North of England Programme have aimed to do this. Further research is needed to explore how best to do this in a way that is not rejected by smokers.

The decline in prevalence of illicit tobacco purchase between 2007-8 and 2012

reported in this thesis was accompanied by an overall increase in the price smokers paid for cigarettes and tobacco. This finding would appear to contradict the tobacco industry's assertion that demand for cheap tobacco rises with increase in tobacco taxes (Joossens and Raw, 1998; Howell, 2011). However, it is important to highlight the limitations in the methodology used to derive these price estimates such as: tobacco expenditure and consumption being subject to recall bias and the theoretical implications of using unit values as a proxy for price which could produce biased results (Nelson, 1991). Price being the main incentive for illicit tobacco purchase (see chapter 7) was further emphasised by the finding in the current thesis that smokers who purchased cigarettes and tobacco exclusively from illicit sources paid the least for cigarettes and RYO tobacco (see chapter 9). This finding supports the argument that illicit tobacco trade undermines the effect of tax increases by making tobacco products available at a cheaper price. Being male, of an older age, with low social status and high tobacco dependence appear to be associated with reduced price estimates for duty-paid cigarettes and RYO tobacco. This finding points to the possibility that although these smokers did not report illicit tobacco purchase, they may have engaged in price minimising behaviours such as tax avoidance. There is the possibility that with rising tobacco taxes and increasingly affordable budget trips abroad, legal tax avoidance may become a common occurrence. There was an indication of this from the interview study with some smokers reporting that they would travel abroad to low tax jurisdictions to purchase tobacco products at a cheaper price, if unable to purchase illicit tobacco (see Chapter 7). In addition, findings from the current thesis surveys appear to show an increase in tobacco purchases abroad between 2010-11 and 2012 (see Chapter 6 and 8). Future research should explore the extent of smokers' use of price minimising strategies to

mitigate the effect of high tobacco taxes. Tobacco control policies will need to take into consideration the impact of legal cross-border shopping on smoking cessation efforts.

Regular illicit tobacco buyers reported that loss of access to illicit tobacco would drive them to think about quitting or cutting down on their smoking (see Chapter 7). This is possibly because access to cheap tobacco provided these smokers an affordable means of sustaining their smoking. This makes the availability of illicit tobacco a critical public health issue that contributes to the burden of smoking-related illnesses. It is of no surprise therefore that smokers who reported illicit tobacco use were less motivated to quit smoking and more likely to report not wanting to quit smoking. However, there appeared to be no association between illicit tobacco purchase and making a past attempt at quitting. This suggests that although less motivated, smokers who purchase illicit tobacco make attempts to quit smoking. Moreover, this implies that being able to access cheap tobacco is not the primary factor in whether smokers try to quit, but it may determine whether they succeed in doing so. In addition, illicit tobacco users may go through various stages of behaviour change, with intentions at some point to quit smoking but were not successful. This could have been due to being able to access cheap tobacco, as well as other factors such as tobacco dependence. Smokers who report illicit tobacco use may require other strategies other than high taxation to encourage targeted them to quit smoking. Alternatively, these smokers being unwilling to quit smoking could be targeted with harm reduction strategies which allow them to continue to use some form of tobacco but at a much lower risk to their health i.e. cutting down on their consumption.

The complex nature of illicit tobacco trade demands collaborative working across agencies to maximise the chances of effective strategies to eliminate this illegal market. The North of England illicit tobacco programme was a world first at the time of its launch in 2009. At this early stage of the programme key stakeholders viewed it as having great potential although concerns were raised around resources, partnership working and intelligence sharing. Nevertheless, between 2009 and 2011 there appeared to be an increase in awareness of illicit tobacco trade in the region, increase in intelligence reports to the hotlines during the campaign period and promising reductions in demand for illicit tobacco attributable to the Programme (McNeill et al., 2012). This demonstrates the benefits of joint working between enforcement agencies and health professionals. Moreover, this partnership working may shift smokers' anti-government views (see Chapter 7) if health professionals and not only customs officials (who may be viewed as just interested in revenue losses) are seen as tackling illicit tobacco trade together.

11.3 Conclusion

Illicit tobacco remains a major threat to tobacco control efforts and public health which requires continued address, especially with talks of an endgame for tobacco (Warner, 2013; Wilson et al., 2013; Arnott 2013). This thesis focused on the experience and beliefs of smokers on illicit tobacco trade. This was important to provide a valuable overview of how policies impacted on smokers' purchasing behaviour and their attitudes towards illicit tobacco. This thesis provided an estimation of illicit tobacco use at varying time points in England. In addition, it contributed to the greater understanding of illicit tobacco purchase; identified smokers most likely to report its use; reported on smokers' beliefs and views on illicit tobacco trade and the views of partners in

a multi-agency approach to combat illicit tobacco trade in the North of England. Most important was the documentation of the emergence of a relatively new source of illicit tobacco, which undoubtedly has implications for future anti-illicit tobacco trade policies. This research has emphasised the importance of monitoring and surveillance of smokers' involvement with the illicit tobacco market. It is hoped that this thesis has contributed to the limited existing literature on illicit tobacco trade and to the development of future policies.

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APPENDICES

Appendix 5.1: Interview topic guide for study on key stakeholders' views on the North of England Illicit Tobacco Programme

1. Background details

How did you become involved in the area of illicit tobacco?

How big a part of your job is it now? Estimate percent of time spent on tobacco control.

PROBES: Before the launch of the North of England Programme, roughly how much time did you spend on tobacco?

How much of this was spent on illicit tobacco?

Have you been involved in any collaborative work on illicit tobacco?

2. Early involvement in the North of England Programme

When you heard of the programme what were your initial thoughts about it?

Did you feel it would have an impact on tobacco smuggling?

PROBES: What kind of impact did you expect?

Did you have any concerns about the Programme?

Were there any differences between your early thoughts for what was needed and the Programme that was launched?

3. Decision to get involved in the Programme

What led to your involvement in the North of England Programme?

PROBE: When did you become involved in the North of England Programme?

What were your expectations when you started the Programme?

What did you think your role would be?

4. Knowledge and understanding of the North of England Programme

What do you think the programme is aiming to achieve?

Can you remember what the 8 objectives of the programme are? (a light question to lead to the next question).

Of these, which do you feel are most relevant to you?

PROBES: What outcomes do you expect will be achieved in the short term i.e. 6 months – a year?

What outcomes do you expect in the longer term?

Are there any barriers to achieving these?

5. Role within the North of England Programme

How would you describe your individual role within the Programme?

PROBES: How are you involved in other tobacco control alliances in your region?
Have you come across any challenges in your role?
PROBES: How did you deal with these challenges?
What do you think of the overall programme management?

6. Progress so far

How well do you think the programme is progressing?
PROBES: Do you think it is on track?
What do you think has been achieved so far?
Do you think that overall the multi-agency partnerships are working?
Thinking about your individual project now. How well do you think this is progressing?
Have you learnt anything from the Programme so far?
PROBE: Please state

7. Looking Forward

Thinking back to the objectives of the programme; are there any barriers/challenges that you feel need to be addressed if the Programme is to be successful?
Are there any changes that you feel are needed in order to move forward?
To what extent do you feel the Programme will meet its original goals?

8. Final thoughts

Are there any final comments you would like to make about any aspect of the Programme?

Appendix 5.2: Transcribed Interview Example with ‘Health’ stakeholder

BIK: How did you become involved in illicit tobacco?

Health2: Well I came into this role when there wasn’t a region wide collaborative programme in July 2007. And I’d previously being programme director for Smoke-free Liverpool and we’d recognised that illicit tobacco was an issue and had already had some initial conversations about setting up a joint enforcement team around illicit tobacco. And recognising that in terms of tackling inequalities and the bigger picture around smoking that it was something that needed to be part of a comprehensive approach. So came into post, leaving that behind at a sort of local city level and ... and ... had already started to have those conversations at a regional level. And therefore said that really very much wanted to join up with that.

BIK: So before you got involved with the north of England programme, how much time did you spend on illicit tobacco?

Health2: Before I got involved with it? Probably very little; in that, I think at the time it was an emerging issue amongst trading standards at a local level, rather than being sort of number one priority. So I don’t know, I don’t know less than 5% of my time.

BIK: And now?

Health2: Probably at least 20% of my time, and sometimes more

BIK: You mentioned before that you’ve been in collaborative work around illicit tobacco before the programme?

Health2: Well, It was more about....When I...Although actually that team is now in place, it was only an idea of a team when I was there. So It was about partners coming together to have those initial conversations. So there wasn’t actually any collaborative work done then, no

BIK: So I gather, you knew about the programme before it was

launched?

Health2: I suppose collaborative work, that's not true, collaborative work between local authority and PCT yes, collaborative work involving Police and HMRC no. So there was collaborative work but it wasn't across all the stakeholder partners

BIK: When you heard of the programme, what were your initial thoughts about it?

Health2: I think, just recognition that....In all my experience of collaborative working, it's always being positive. A recognition that you can achieve very much more together than you can do as individual component parts. And that this was an issue that needed to be tackled. And it was undermining national and local and regional work. So it was an absolute commitment to making this a priority and finding ways to work together.

BIK: So would you say you were quite excited that such a programme was going to be launched and something was going to be done on illicit tobacco?

Health2: Yes

BIK: And you felt that this programme would have an impact on tobacco smuggling in your regions?

Health2: Well I think I hoped that the programme could have an impact on both the supply and demand for illicit tobacco too

BIK: The programme has only being going on for about 3-4 months now? Is that right?

Health2: Well it was only officially launched in July. But I do feel like it's been very much under way since the first event in December 2007. In terms of the work that needed to happen to get us to this point.

BIK: So what you've done so far, do you think it will have an impact on supply and demand of illicit tobacco?

Health2: I don't think what we have done to date would have any impact on demand. I think there has, well certainly over the last 12 months; there has been joint enforcement work between....It's not really over 12 months though, is it? Its...there has been planning of enforcement...Some intelligence sharing and planning. And then over the last few months, since sort of April-May time there has been some joint enforcement work. So I don't expect it's had any significant impact on supply, but it will have had some impact.

BIK: Did you have any concerns about the programme, when it was being developed or after it was launched?

Health2: I guess my enduring concern is how do we make partnership working effective? And how do we ensure that there is the commitment from across all agencies to make that as effective as possible. And how do we ensure that...You know what ever joint enforcement activities...Well I guess there are two sides...Kind of intelligence sharing issues, which I'm sure you'll be aware that there have been challenges and issues and then there's kind of...So there's the intelligence sharing ahead of the joint enforcement work and then there's the feedback loop to in terms of feeding back the outcomes of that joint enforcement work. Or perhaps individual agency enforcement work based on joint intelligence back into the system. How do we make sure that there is always a feedback loop? That we are really sharing and therefore maximising all of the opportunities. Because I think that...You know there is a challenge in terms of, for us in the North West there are 22 trading standards departments who operate independently, although there is trading standards nw as an umbrella organisation. They all have their own autonomy. There are two inland detection teams, but essentially they are part of one North West team aren't they? And then we've also got 5 police forces. How do we make that all...very disparate, very culturally different organisations, how do we facilitate that joint working across those organisations and really get most bank for our bucks really.

BIK: And do you have any ideas of sort of how you think you can make this work, in terms of the relationships between the different organisations and trying to work in this programme?

Health2: You know, I think probably one of the most important things is communication, isn't it, across stakeholders. I think having a good understanding of how each of the different organisations work and its cultures and where it's coming from, because I think, having attended that two days in Ipswich a couple of weeks ago. It was really clear that HMRC didn't understand how Trading Standards and Local Authorities operate and similarly Trading Standards didn't really understand how HMRC operated. Although I think, it's probably relatively easy to find out how

Local Authorities and Trading Standards work because I think there is quite a lot of transparency; there are quite a lot of things you can go away and read that would tell you that. I don't think there is anything that Trading Standards can go away and read that would tell them how HMRC works. So in terms of the sort of the shrouds of mystery that surrounds the different organisational structures and bureaucracies within HMRC, I think that has been quite difficult to unpick really. And appreciating that it is a much more bureaucratic hierarchical type organisation than the NHS for example, is not difficult, but understanding where, so you can understand that on face value and recognise you have to work in a different way but unless you really really understand the complexities and who's who and what the lines of communication are and what the appropriate forms of communication are, it is just a minefield for us as rtpms and I think for trading standards too

BIK: And do you think the success of the programme in general, hangs on this relationship between the organisations working, would you say?

Health2: Well I think if you have two organisations, well in terms of the enforcement organisations you probably need to say three because I think the Police are really important too. But if you have organisations that don't have a history of effective partnership or joint working, then yeah the success of the programme has to hang on that happening. And that won't happen unless there is both trust and good communication across organisations. And you know a

recognition of shared goals

BIK: Are there any differences between your early thoughts about the programme and what was launched in the end?

Health2: Erm...

BIK: So what you thought was needed in the programme, is that different from what was actually launched?

Health2: Erm... probably for me, I would have liked the police to be more engaged early on. I think in all regions they have come on board slowly. But the key thing has been having Trading Standards and HMRC engaged. I suppose I envisaged the police being part of it from the start. And that we had an alcopo representative within the steering group for the development of the programme. And again that's probably about some level of naivety about the autonomy of police forces and trying to work on a regional level is a very difficult one. I mean the police have very much resisted any kind of regionalisation haven't they? And so recognising that we need to meet them as individual forces and bring them on board one at a time has been more difficult than perhaps we anticipated.

BIK: And do you think it would have been better to have them (the Police) on board earlier?

Health2: I think in terms of the point we are at now with joint enforcement activities, yes, it would have been better.

BIK: So what are your expectations of the programme? I know you mentioned trying to reduce supply and demand of illicit tobacco; do you have any other expectations of the programme?

Health2: I think I hope that the programme will demonstrate enough effectiveness and value in order to be sustained into the future by more local partners. I hope that we can begin to changes some of the social norms around

illicit tobacco use and really don't underestimate what a big job that would be. And I hope that through coordinated activities across regions and not just within regions that we can potentially begin to have a significant impact over time. It may not be a significant impact within the lifetime of the sort of early funded part of the programme on supply. I do think that its strength is as much in the coordination across regions as it is in the coordination between agencies within regions because I think that the nature of the problem is such that we have nowhere near reached market saturation. And therefore taking out... Even if you reduce both supply and demand in one area, there will always be a new market potential to be, capacity to be developed in another area. Whilst level of profits to be made in this are so great, there'll always be that push for a criminal fraternity to diversify their markets and to sell elsewhere if they are targeted in one area. And that's why I think the event yesterday (illicit tobacco workshop) was important and that the opportunity to kind of have similar approach being taken across other English regions and ultimately to kind of join it all up at a UK level is really important. I think something I've been able to learn is how important it is to actually raise awareness about illicit tobacco, cos it seems a lot of people don't know it's in their community or don't know it is illegal, so how important do you think that is? I mean it's one of the objectives of the programme isn't it? I think it is really really important. I think in any social change model, raising awareness is the first part of that cycle, isn't it? Unless people fully understand the wider community and social impacts of illicit tobacco, its impact on children and its links to wider criminality, its impact on community cohesion. Unless people not just are aware of that but really believe it and feel unhappy about it, then we are not going to see any level of behaviour change

BIK: And also I've heard about the customs hotline, is that where people call in to report anyone selling illicit tobacco, is that how that hotline works?

Health2: Yes so what's the question about?

BIK: I'm just trying to understand it, because I'm new to all this you see; so I'm trying to understand, what the hotline is for, whether it's for people to call in and...

Health2: Yeah so that's the reporting line. And whilst I recognise that some stakeholder's partners have had concerns about whether that's the best reporting line and whether the public are really likely to call a government agency.

BIK: And is that HMRC?

Health2: So it's the Revenue and Customs Hotline

BIK: And how is that information fed back to the other stakeholders in the programme? I am assuming that it would be...?

Health2: Currently in terms of information about calls to the hotline, we haven't had a lot of information that is just beginning to be shared. And the workshop that we had in Ipswich a couple of weeks ago was about finding legal mechanisms to do that most appropriately. And I think that we will in the future and that information will be shared in a quite detailed way with Trading Standards and in a less detailed way with partners like myself because of the legal gateways that exist.

BIK: So when you started the programme, what did you think your role would be in it?

Health2: I suppose I thought it would be a leadership role, obviously funding. And so yeah, I saw it as leadership and bringing people together

BIK: Now this is a question I'm asking everyone, because I find it hard to remember all the 8 objectives myself, so I'm going to ask you if you actually can list all 8?

Health2: Just ask me when I've had 3 nights of no sleep and I'm really not feeling very well.

BIK: I know it's not fair

Health2: I have to say I probably in my head tend to chunk them anyway into objectives that are around intelligence and enforcement. Objectives that are around raising awareness, whether that be with the public or with wider stakeholders. And then objectives that are around project management, evaluation looking at the performance of the programme. So I'm not even going to try, I just think I could probably, if I closed my eyes I could probably visualise the PowerPoint in front of me and get them out. And I have on many occasions given this presentation so I should be able to go yes yes yes but you know I think actually in fact, I'm sure Ann did for the purpose of KPIs did chunk them together, and I think that is quite helpful.

BIK: Maybe an easier question would be what objectives you think are relevant to you?

Health2: What do I think are relevant; I think they are all relevant to me because I think...I do feel that as RTPM's we do have a real leadership role across the whole programme. So in terms of delivering on the increased sort of coordination, intelligence mapping, and enforcement capabilities, obviously we can't do any of that. But in terms of facilitating the partnership working and making that happen, then I don't think it would have happened without us. I really don't think that the challenges of achieving any level of effective partnership working across enforcement agencies or in particular between hmrc and trading standards who are the two key agencies. I think they would have each developed their own working relationships with local police and that would have happened anyway. But working together, I don't think we would be at the point we are now without the RTPMs. They might have got there eventually, but we wouldn't be there now. So, that would be the only area where I could say really that's not apart from funding, that additional enforcement capacity that really shouldn't be my responsibility but I really feel like it is my responsibility. And if it doesn't work I will feel like it is my responsibility which is really hard

BIK: In terms of the objectives, enforcement, raising social awareness and all of that, do you think there are any challenges or barriers to achieving those objectives in the programme?

Health2: I think that the barriers...We'll start with enforcement; I think the barriers to enforcement are about...the barriers that exist between organisations, lack of trust between organisations, different structures of organisations, different cultures of organisation. Having new teams for HMRC...I mean any organisation that undergoes significant level of restructuring it always takes a while doesn't it, for them to move into a phase of becoming effective again. And I think the other thing that, I think is quite...I suppose an opportunity in the threat is the performance management monitoring regimes around both sets of enforcement agencies require them to deliver and whether or not they consider joint enforcements to be...Joint enforcements aren't part of that delivery mechanism, performance monitoring mechanism at the moment. They don't get a tick for doing a joint enforcement. But they do get a tick for their own enforcement and their own seizures. And I think that is one of the things that still need to be negotiated. And my understanding actually is that for hmrc and their new inland detection teams that the performance framework hasn't yet been fully put in place for them. So I hope there is an opportunity there to make that one of the ways by which they would be measured. But in the end they will be measured by seizures, inland and so they would want to own those operations. So is that probably a reason why there isn't a lot of information sharing going on, because each organisation still wants to. I mean one of the IDT managers says in his presentation to partners he always says, it used to be that within the organisation we had a saying that intelligence shared was a job lost, but that's not where we are now. But if you've had that culture for the last 15 years then it doesn't change overnight. So whilst at management leadership level there might be change, that's got to translate all the way down, hasn't it? And I do think unless the performance framework that you are operating under rewards that kind of joint working then whatever the rhetoric people will watch their backs and will want to deliver on their targets won't they? And I don't think the economic climate that we are in for the public sector is very helpful either for the programme, or for any of this. I know that within HMRC even though they have just undergone a big restructure over the last few months, they have started cutting posts and redeploying people. Not in the inland detection teams, but in other parts of the organisation people are actually losing their jobs. Again that doesn't breed partnership working either does it?

BIK: And around raising awareness? In terms of raising awareness, and reducing demand, I do think that we've got huge opportunities open to us because there is not a lot of work on marketing and communication work that has been done before has been....One of the primary aims has been driving traffic to the hotline and getting people to report. And I do think that in terms of raising awareness and changing attitudes, that what we need to do is not necessarily about calling the hotline. It might be about speaking out within your community. It might be about changing, obviously people beginning to change their buying behaviour. So I don't think that reporting to the hotline is necessarily the best measure of success. And that was why really I suggested that actually I really think that it would be helpful as part of the centre's work if you might look at developing a social and acceptability index around illicit tobacco use in the same way as we have around smoking per se. Because I think it's really going to be important that we can track this, not just for the next 2 years, but for the next 10 years. And I think that we all believe from both the qualitative and quantitative research that has been done that it is now a norm across all social groups, that it is culturally engrained. But we don't...We haven't necessarily refined the questions to test how people's awareness and attitudes might be changing over time and I think we need to do that now.

BIK: So would you say that's one of the challenges in trying to get this measure across that you can't really measure the change?

Health2: Yeah I think we can measure some of it. We have some questions that we have done in the baseline survey and we can adjust them again and it would, it would do that. But because reducing demand hasn't really been very extensively tested or robustly evaluated, academically evaluated in other types of similar work internationally. I mean this isn't just about this country is it? It's about looking at the evidence base and saying there isn't actually really any evidence base around demand reduction is there? So we need to develop one, so we need to ensure that whatever we do is really really robustly evaluated and that we take the learning into the next stage as we move forward from stage to stage. So I think it's a big challenge for us. I mean instinctively I think that we have moved social norms significantly around smoking. And it

hasn't been a sort of one prong tack has it? It's been very much about multi-faceted, comprehensive programmes that have involved many different kinds of change, but we have seen those changes around people's attitudes to smoking both amongst smokers and amongst non-smokers. But we need to be able to demonstrate that in the same way. I'm not saying we are going to do that in 2 years but if we can put in place really robust tools to evaluate this type of work then over the next 10 years we might begin to do that.

BIK: I think one of the objectives was developing those partnerships in the regions, do you think there are any challenges to achieving that?

Health2: Within regions or across regions?

BIK: Well, developing partnerships....

Health2: Well I mean developing partnerships in its broader sense was about recognising that some of these partners are national partners and therefore the partnerships cross regional boundaries, certainly cross local boundaries. But I guess then it is about developing partnerships at all levels and ensuring that the opportunities for feedback around those partnerships are both top down and bottom up. And what I think we have at the moment is, I think we are doing ok at the pan regional, regional levels. And I think we are doing ok within regions at some of the bottom up stuff. But what I think we need to get better at is ensuring that the kind of bottom up stuff learning is shared across regions so that we are maximising the opportunities to learn and to move forward more quickly. So that where challenges are identified, where opportunities are created and acted upon in one region we are getting all that learning across regions from the bottom up stuff as well as the top down stuff. Because I think the top down stuff are quite good at sharing

BIK: So something that needs to be worked on is the bottom up sharing?

Health2: Yes

BIK: So coming back to your role in the programme, how would you describe

that?

Health2: Well starting with my role within the region, as being to bring partners together, to provide leadership, to make the case for this work across, not just the partners who are involved in the programme but across a much wider range of stakeholders who have an interest in tobacco control or in health inequalities across the region. And ultimately I guess I have some responsibility for the delivery of the programme results. That feels like quite a difficult thing really because it often feels so without my power when effectively the enforcement is all being delivered by Trading Standards and HMRC. But you know in terms of how this programme is judged, it will be judged on reducing the supply as well as the demand. And in terms of the evidence base I absolutely accept that the evidence base is that additional enforcement activities is one of the most effective things we can do to tackle this problem. So then I guess I also see myself as having a role obviously in terms of the sharing across regions and coordinating across regions and then a national role in sharing with other colleagues. I do think as RTPMs we have taken a lot... I think particularly ... and I have taken a lot of the national leadership on this issue in terms of who people will come to talk to about illicit tobacco, then its likely to be us than anyone in the national team. And that's partly because there has been some gap in the national team. Wider demands on the resources because of the other agendas that have been there; but its also because of in terms of amassing expertise and knowledge by developing this programme and taking it forward, we've done that.

BIK: The RTPMs are at the top of the governance board, do you guys make all the decisions surrounding...?

Health2: Well, the governance board makes the decisions, so we don't make the decisions. And the governance board has representation from the wider partners. But in terms of the decisions about how the programme is delivered...I think probably more recently because there has been lack of clarity around intelligence sharing and joint enforcement activity we did get to the point where we were saying well if this isn't sorted we will have to pull this programme and that would been our decision because in the end we are the

fundings. But for the other decisions in the programme, it is clearly appropriate that those partners who will be delivering are part of that decision making process.

BIK: And in your role are you involved in other tobacco control alliances?

Health2: So we don't have a regional alliance as such we have a governance board for our programme, but we have four sub regional tobacco alliances in the region and then we also have local tobacco alliances too. So I'm involved in and members of my team are involved in supporting alliances across the whole region.

BIK: So in your role it seems like you have a lot to do in terms of the programme, and representing it nationally, have you come across any challenges in trying to get the programme working or just your role in the programme?

Health2: I think the biggest challenge has been supporting partners and partnership working within HMRC and trading standards. I'm sure as the programme progresses that the challenges will change and will diversify. But that has been the biggest challenge to date has been helping to ensure that the channels of communication between partners remain open and are effective and helping to build trust across organisations. I guess we have felt like the brokers in a lot of this because you know the lack of trust and the level of challenge at times has been fairly high. So yeah we have felt like the peace brokers.

BIK: That must be difficult

Health2: Yeah

BIK: So what do you think of the overall management of the programme?

Health2: I think that we...I'm concerned that we don't currently have a programme manager in place.

BIK: Was there one before?

Health2: Yeah we did put a programme manager in place, an overall programme manager. And that was meant to be a temporary solution until...And also the right person to come in and set up a programme is not necessarily the right person to lead and manage a programme. Sometimes I think that...particularly in a programme where there clearly were big differences between enforcement partners. I think it was quite important to bring some one in who was neutral and who didn't have any loyalties, allegiances. It was good to bring in someone who came in with a completely fresh pair of eyes. I think that was very helpful and it was the right thing to do in the first instance. It just wasn't possible to keep that person in post because the agency rate that we were funding at was just not really sustainable in the longer term. So I think it is important that we do get...I'm not sure that it's a full time role. But that we do get a project manager back in place as soon as we can because I do think it's important that we are sharing learning across regions and we have that coordination across regions and some one with overall responsibility for what's happening. So what's happening at the moment is that we are having to pick that up as RTPMs or as the trading standards leads in the regions and I don't think that is working brilliantly.

BIK: So how do you think the programme is progressing generally?

Health2: I think that we are doing really well. And I think that the level of engagement and resource that has gone into pulling the programme together has been time really well spent. I don't think that we could have necessarily done it any quicker. Might be possible for other regions to do it quicker. Us having kind of done some of the work around helping to develop protocols for ways to work together etc. But I think we have achieved a huge amount. I think amongst stakeholders we have put this, not on absolutely everybody's agenda yet, but I think among the important stakeholders it now is on peoples agenda at least at a senior level. I think there is still work to do to kind of have the trickle down throughout organisations. And I think that there is more work to be done with local strategic partnerships and crime and disorder reduction partnerships and I think we've started that and we are doing a good job. But in

terms of this being absolutely locally owned, we are not there yet, I don't think any of us would say we are quite there yet. But I think we've achieved a phenomenal amount. And I think that the fact that we have got joint enforcement activity happening in every region and there is now a willingness to share intelligence and to...I think sometimes in HMRC we get very hung up on definitions of intelligence. I guess what I'm talking about is the sharing of hard intelligence with other enforcement agencies but also the sharing of soft intelligence with other partners like health partners. And a willingness to kind of overlay all of that to provide a really rich map of what is happening in each region and what is happening across regions is an opportunity that has never being there before. And I think the qualitative and quantitative research that has been done with the public to understand their levels of awareness and their attitudes to illicit tobacco. I think that is a really fantastic baseline for the programme. And gives us a lot to build upon for our marketing and communications work. And has very much fed into the work that has been taken forward nationally in terms of the development of a national hmrc/dh marketing strategy. I think we've in the north had a big role to play in the development of that. I think the closer working protocol between lacors and hmrc which is meant to be the mechanism for supporting all of the intelligence sharing and enforcement. Which only finally got signed off earlier on in the summer. And still we've needed another workshop to try and kind of actually make it work. But I don't think it would have got signed off without this programme. I think its pushed things forward nationally on a lot of issues and a lot of agendas. I think the level of interest in and recognition of the need to do more around niche tobacco products nationally, that too has been very much driven by this programme. I think that the recognition that there is a role for health at all in this agenda, has been driven by this programme. And I think really sort of cementing, embedding the idea that this is about tackling health inequalities and...That this is important at local, regional, national level. I mean obviously recognising the international level work and how important that is. Cleary we haven't influenced that work that is something happening alongside what we are doing. But really getting this unto the agenda at all levels. Not saying we are there yet, still a way to go but I don't think it would have happened without the programme.

BIK: So in general would you say the programme is on track?

Health2: I think we are doing ok. I'm someone who likes to, you know...I would have liked it to travel a little more quickly, but I think that we are doing ok. And I think that as long as we can sustain the work right up to sort of September/October time in 2011 that we will deliver what we set out to deliver. I suppose my biggest concern is about sustainability and what is going to happen with funding streams for next year. So you mentioned before about the partnerships, there have been some challenges around information sharing and trust and all that, would you say in general the partnerships are working? I think we are getting there. But I wouldn't say they are working well.

BIK: So they could be improved?

Health2: I still think that there is scope for improvement because I think that making agreements two weeks ago doesn't mean everything is working well in practice. That is still only the agreements. I think there are some hurdles to cross yet. But at the same time I also know that at a regional level that the relationship between the inland detection team manager and the trading standards lead is good and they are sharing intelligence and they are doing joint enforcements, it is happening. But in order for me to be able to say the partnerships are working well that needs to be happening in a fully officially sanctioned way, not just in an adhoc way. It needs to be systematised. It needs to be routine and whoever steps in those shoes, it will carry on. Whereas I think it's relying to some extent on existing relationships at the moment and that will change I'm sure. But I think its early days.

BIK: So coming back to your individual role in the programme how is that progressing?

Health2:I think probably that I hoped that by this stage I would be able to step back a little bit more and be less involved in day to day.

BIK: So who would have taken over your role? Don't you need to have an RTPM involved?

Health2: Yes, well I don't know. Not that I will step back completely, but just it wouldn't be taking up so much of my time.

BIK: So now how much time do you spend?

Health2: Well I think it's been at times more than 20%. But I think it is at least 20%. And I think it should probably be more like 10-15% really. If everything were working well, then it shouldn't be more than that for me as an RTPM. That's not to say that nobody else on my team will be working on it because I think in terms of the marketing and communications work, I think clearly there is a role within the team to lead that work and to take that forwards. But for me personally I still feel like it is taking up more of my time than it ought to

BIK: Why do you think that is?

Health2: Well it is about still needing to facilitate partnerships across other agencies and still having that role as broker. Which you would expect to an extent that that would still be there of course. It's not that I think that would disappear entirely. We certainly haven't got a protocol for sharing. It's in early development stages but we've had to focus on protocols around joint working sharing between hmrc and Trading Standards. But we've still got health to bring into that picture, and that is still under development. And I think that is going to be quite tricky as well. And would absolutely see that as my responsibility. But I think hopefully the agreements that were made in Ipswich would mean that between hmrc and trading standards, that some of those mechanisms for sharing intelligence and for joint enforcement and planning and coordination, that that would be put in place and that would happen.

BIK: Have you learnt anything from being involved in the programme?

Health2: I've learnt loads about illicit tobacco. I mean I can't pretend that when I came into this I really knew lots about the complexities and kind of international perspectives and...I definitely didn't have a good international perspective when I came into this. I've learnt absolutely masses and ...I think, although it's been challenging, it has been enjoyable. I think challenges are

really high on my needs list so I do...I have really enjoyed it, however difficult it has been at times. I think it's been a really interesting experience. And I think potentially really valuable and absolutely necessary.

BIK: Are there any issues that you think would need to be addressed for the programme to move forward?

Health2: I think there are still issues to be addressed in terms of making things work between HMRC and Trading Standards. And that's not to be negative. It's just that I still think that on a very practical level, we're going to have to...What we have agreed is to a pilot way of working, so it is still very much about, lets see how this goes, what we learn from it, there may need to be further improvements, refinements to ways of working. So that still remains a concern. I think in terms of understanding the messages that are likely to...You know, a job to do around awareness raising but understanding the messaging that is likely to change peoples attitudes and would lead to any change in behaviour. There is so much complexity there and so much we don't yet know. And I think that is going to be a big challenge. And I'm really concerned that the impact of the age of sale change appears to be that may more young people are buying their tobacco from illicit sources. And so what we are developing...Based on the marketing research it would appear that they fall very much into the attitudinal groups that are very unlikely to change their buying behaviour because of any marketing activity that we deliver. So it's almost like we are sort of growing a whole new generation of illicit tobacco smokers who when they get to 18, if they've been paying £2.50 or £3 for their cigarettes, just because they've got the money would they move into that legitimate retail market or will they continue to buy illicitly. So I am concerned about that. And therefore in terms of the work we need to do nationally around turning off the tap and stopping the influx of new smokers. How effective will we be when illicit tobacco is still so cheaply and freely available to young people, undermining all of the other levers we had around young people? Sorry the question was about challenges for the programme...or...just remind me, sorry I think I may be going off track.

BIK: I was asking about what issues need to be addressed to move forward in

the programme?

Health2: I think in terms of...I am absolutely 100% committed to using the hmrc hotline as a reporting mechanism. And understand now in a way that I didn't fully 2 weeks ago why it is the best option. And how important it is that people who have reported this behaviour are protected given the wide links to criminality. And there is no other system that we have at the moment...Even crime stoppers refer a lot to the customs hotline. So there just isn't another option. Whether I think....I think the barriers that exist for the public in reporting through revenue and customs hotline are still there. And even if you put a neutral non branded front number on, when they get through and it is dial 1 for the revenue and customs hotline, I think that might still be a barrier for some people to report. So I'm still very concerned about that and that applies to the website as well. And I do think that it is not necessarily an easy process. And I'd also be concerned about capacity, should we significantly increase volumes of calls. One of the other challenges for the programme that we as a regional programme and a pan regional programme, it is more of a challenge for us. And I think this is one of the areas, where HMRC absolutely couldn't do this without this programme; is that if we really want to be most effective in our marketing and communications activities. And if we want to be most effective in the intelligence generating activities which may or may not be marketing lead that we need a really strong, very locally focused community engagement, community development approach. And I really do believe that if we are going to reduce demand that is what we need and that can only happen at a very local level. I mean trading standards being partners are well placed to mobilise and the NHS partners are well placed to mobilise some of that activity. My experience is that developing programmes that really empower communities to take action and to own agendas; you need to be willing to give over quite a lot of your power and responsibility and invest it with those people. And that's really hard for us to achieve as a regional programme. It's totally dependent on good will and effective infrastructure, and capacity to support that kind of work locally. And we can't put that in place through a regional programme. And it's much much better in some local areas than it is in others. But I do think that that would be key...and I do think that in terms of changing social norms that mass media can be very effective and there's a

place for that. But I also think that engaging communities needs to be part of this. And I think that is going to be one of the things that is most challenging for us over the next couple of years

BIK: To what extent do you think the programme would achieve its original goals?

Health2: Well since we didn't quantify the extent to which we would reduce supply or demand. I think it is hard to measure though isn't it? It is really hard to measure isn't it? And since we...In sort of July 2007 we didn't realise what was ahead of us in terms of massive economic recession which effects not only individuals' purses but also the public purse. We really didn't know any of that did we? So I think that I am not confident that in 2 years we would see any significant drop in prevalence that could be in anyway attributed to the programme. But I think that if we can...We'd also recognise that in terms of what's happening around....In terms of supply that we know that about sort of 1 in 10 container loads is stopped from getting into the country by, either stopped overseas or stopped by UKBA at the border. So we've still got 9 containers coming in. So in terms of what is being seized, they are only seizing a tiny fracture of what is out there. So even if we increase seizures, it is still very possible, giving the experience over the last couple of years how smugglers have diversified their supply into the country, that they would find another route, they would find other ways. Whatever market disruption activity takes place, because it is organised crime, they may very well meet the challenge and find other ways around that. But I do think that if we have got this onto everybody's agenda, in a way that it wasn't there at the beginning and it's a priority. And it's a priority for cross agency working. And I think that if we can begin to shift public attitudes at least in some of the consumer segments, then, it may not be the ambition that we initially set out to achieve but I think we would have done our job.

BIK: I gather that there's going to be a national strategy on illicit tobacco being released soon, is that right?

Health2: Yeah

BIK: How do you think that would affect the programme? I don't think it would affect it or maybe have an impact on it?

Health2: I mean hopefully it would have a positive impact. And certainly we've been really really involved in helping to pull that together and input into that. So I see that as a real positive and a real opportunity.

BIK: Do you have any final comment to make about the programme in general?

Health2: I think that, probably as a final comment, whatever challenges and complexities and difficulties there has been around making the partnerships between HMRC and trading standards as effective as possible. I do think that from all organisations there has been a real commitment. And in all organisations there has been some really fantastic leadership. And for Trading Standards I think, acting as one regional body when you've got so many local authorities sitting within the structure is a challenge in itself. And I think for HMRC adapting and being flexible enough to meet different needs and approaches within regions. And even accepting that you have to deal with everything 9 times, or obviously in this case 3 times or even 22 times in the northwest in terms of having to go out and do those of kind of one to one building relationships, building trust with the IDT manager. That's a really big ask, and therefore I think that the level of commitment shown by all partners has been just phenomenal.

Appendix 5.3: Study One Thematic Chart

General views on the Programme		
Themes	Sub-themes	Quotes
1. Initial thoughts on the Programme	1.1 Exciting/a good idea	<p>‘I thought it was a fantastic and innovative project’ (MCC2)</p> <p>‘But the overall scope appeared to offer an excellent chance of doing some really good work’ (Local Enforcement Agency4)</p> <p>‘Early thoughts were, an absolutely fantastic Programme’ (MCC3)</p> <p>‘It’s interesting because it’s a new Programme, it’s an ambitious Programme. There’s a lot of interest in it because it’s the first of its kind in this country and it’s also a world first so it’s quite an exciting time to be involved in something like this’ (Local Enforcement Agency1)</p>
	1.2 Excitement over joint work	<p>‘I felt quite early on we can act as a catalyst to bring together partners and to mediate between partners’ (Health2)</p> <p>‘A recognition that you can achieve very much more together than you can do as individual component parts’ (Health3)</p> <p>‘So was good to have the working with trading standards from the illicit point of view and developing the health as another strand in our Programme’ (National Enforcement Agency2)</p> <p>‘Closer working was the big thing for me. I wanted to see how as agencies we could share intelligence and see if we could maybe benefit each other’ (National Enforcement Agency1)</p> <p>‘I was excited, I was excited to work with other partners that I haven’t worked with before’ (MCC1)</p>
	1.3 Challenging/difficult	<p>‘But from a very early moment I thought this is going to be extremely difficult. It’s going to be really hard. Because there isn’t a really strong evidence base in terms of anybody else who’s done this’ (Health2)</p> <p>‘So it’s challenging and bringing different agencies together that have had different objectives in the past, you know there’s challenges with it’ (Local Enforcement Agency1)</p> <p>‘My expectations were that it was going to be a difficult journey because we are bringing together very different cultures, Health, customs, trading standards, police, community organisations etc’ (Local Enforcement Agency5)</p>
	1.4 Illicit tobacco a [complex] issue that needs to be addressed	<p>‘Well, my early thoughts about doing something around illicit tobacco was, it’s about time, we need to tackle this issue’ (Health1)</p> <p>‘I felt rather overwhelmed when I started as it was very complex’ (IPM1)</p> <p>‘The early thoughts were we really really need to give this a go’ (Health2)</p> <p>‘My initial thoughts were that this was a very complex issue and that it was a multi-agency and a multi-discipline approach that will be required to resolve it. So a very complex problem that</p>

		needed relatively complex solutions which were driven by research and intelligence so that we are all heading in the right direction' (Local Enforcement Agency5) 'And that this was an issue that needed to be tackled' (Health3)
	1.5 Non-engagement with the Programme's objectives	'Very much on a personal level I used to have the view that why are trading standards investing scarce resources in protecting the brands of tobacco when the genuine products actually kill people. That was my personal thought on the issue. It wasn't something that particularly got me excited' (Local Enforcement Agency1) 'And I must admit at the time I was a bit cynical about it, because my view at the time was well you know why are we bothering to tackle the amount of counterfeit and illicit tobacco? We are just protecting those multi-billion pound firms that make a product that is blooming dangerous' (Local Enforcement Agency4)
2. Rationale for the Programme	2.1 High prevalence of illicit tobacco use in the regions	'I thought it was a really good idea because obviously smoking prevalence is higher in certainly the NE and NW than most of the rest of the UK. We have in the NW a very large population, the most smokers in the country' (Local Enforcement Agency3) 'Y&H is a hotspot for illicit tobacco because of the ports that we've got also because of the M1 and the M62 they sort of come together and therefore it has been identified that, particularly south Yorkshire is a hotspot for illicit tobacco' (Health1)
	2.2 Illicit tobacco an international issue	'And I think there was just a growing sense of yes this is an international problem' (Health2)
	2.3 Lack of information on illicit tobacco at the time	'Because I think there was a real impression that there aren't that many experts' (Health2) 'Nobody really seemed to have a sense of what the scale of the problem was, and issue was and really what do we need to do' (Health2)
	2.4 No one in the health aspect taking responsibility for illicit tobacco	It seemed a little bit like that's somebody else's responsibility (Health2)
	2.5 Illicit tobacco not a priority and this needed to be addressed	'But I think illicit tobacco; it kind of brought home the reality of what i think sort of what we are finding from the Programme is that illicit is not really there as a priority on the agenda of a lot of these organisations' (MCC2) 'And you speak to coppers and they know the houses and the pubs on the estates where you can buy it regularly. And it's just not seen as an issue' (Local Enforcement Agency4)
	2.6 Previous attempts at developing a partnership to tackle illicit tobacco unsuccessful	'So actually there has been some collaborative work done then but it was collaborative without any joined up enforcement, without any infrastructure behind it. In hindsight when I look back on it, it was actually quite naïve really' (Health2)

3. Aims of the Programme and its potential benefits	3.1 To reduce smoking prevalence	<p>‘But it really is attacking...trying to get people to stop smoking’ (National Enforcement Agency4)</p> <p>‘Well overall it’s contributing to a reduction in the smoking prevalence’ (MCC3)</p> <p>‘To reduce the smoking prevalence’ (National Enforcement Agency2)</p> <p>‘Obviously the over arching aim is reduce smoking prevalence’ (Local Enforcement Agency1)</p> <p>‘[...] and to stop people smoking’ (National Enforcement Agency1)</p>
	3.2 To reduce smoking prevalence in young and disadvantaged communities	<p>‘Reducing the supply of illicit tobacco to young people as well as disadvantaged communities, as well as routine and manual that’s the main thrust of the Programme’ (Health1)</p> <p>‘Well I think clearly the main impact here has to be reduce prevalence and that reduced prevalence in deprived communities’ (Local Enforcement Agency5)</p>
	3.3 To reduce the supply of and demand for illicit tobacco	<p>‘Well I think I hoped that the Programme could have an impact on both the supply and demand for illicit tobacco too’ (Health3)</p> <p>‘To reduce demand and to tackle supply’ (MCC2)</p> <p>‘The overall aim is a reduction in smoking prevalence by tackling the supply and demand of illicit tobacco’ (Local Enforcement Agency1)</p> <p>‘Well the Programme aim is to reduce the supply of illicit tobacco so thus reducing tobacco prevalence and tobacco consumption’ (MCC1)</p>
	3.4 To reduce supply of illicit tobacco	<p>‘Well the Programme aim is to reduce the supply of illicit tobacco so thus reducing tobacco prevalence and tobacco consumption’ (MCC1)</p>
	3.5 To make illicit tobacco a priority	<p>‘But I do think that if we have got this onto everybody’s agenda, in a way that it wasn’t there at the beginning and it’s a priority. And it’s a priority for cross agency working’ (Health3)</p> <p>‘[...] or to agree that it (illicit tobacco) will be far more of a priority than it was and probably still is in authorities. So that the Programme will be a catalyst that will move illicit tobacco much more into the core of what trading standards do’ (Local Enforcement Agency4)</p> <p>‘So I think it’s a lot of awareness raising in different levels within different organisations’ (Local Enforcement Agency2)</p>
	3.6 To increase awareness of illicit tobacco in the community	<p>‘I think we will quite easily put illicit tobacco up there as an issue that the public certainly hear about’ (MCC2)</p> <p>‘I think in the longer term I’d like to see illicit tobacco recognised as a problem by the public’ (Local Enforcement Agency4)</p> <p>‘And I think, obviously the campaigns in the areas will actually generate an awareness amongst the public’ (National Enforcement Agency4)</p> <p>‘And also increasing awareness of the general public of the impact of illicit tobacco on the community and health’ (Health1)</p>

	3.7 To make illicit tobacco less of a social norm and less acceptable in the community	‘But I think what we can do is to make illicit tobacco seem less of an innocent solution. And make it less socially acceptable’ (MCC2)
	3.8 To switch smokers to legitimate tobacco	‘So I think really the aim of it was to switch smokers back to genuine tobacco so that other policies can then come into play. But the Programme itself was to switch smokers back to genuine tobacco’ (Local Enforcement Agency3)
	3.9 To develop partnerships	‘And I think it’s to build up an effective system whereby the 3 key agencies Police, trading standards and HMRC in terms of enforcement can be much more efficient and effective in how they share, analyse, intelligence and how they then do their enforcement activity’ (Health2)
	3.10 To develop a mainstream approach within local authorities in the tackling of illicit tobacco	‘I think its aiming to achieve mainstream in tackling illicit tobacco within local authorities. I think that is a major initiative. And mainstream within local authorities and then putting in place a set of structures that sort of really deliver work in tackling it [illicit tobacco]’ (Local Enforcement Agency4)
	3.11 The Programme to be effective so as to be sustainable	‘And for me I thought a lot of this is actually about getting the right infrastructure in place...And then hopefully because we’ve done so much engagement of local strategic partnerships and things we’ll be able to sustain it’ (Health2) ‘I think I hope that the Programme will demonstrate enough effectiveness and value in order to be sustained into the future by more local partners’ (Health3)
	3.12 Benefits: to change perceptions and priorities within agencies	‘And change some priorities within trading standards. And change some perceptions around it being a victimless Robin Hood crime’ (Health2) ‘I hope that we can begin to changes some of the social norms around illicit tobacco use’ (Health3) ‘And it has also changed everyone’s perception. HMRC included, that they understand the health side, health understand the law enforcement side’ (National Enforcement Agency2) ‘A major shift in public attitudes towards illicit tobacco which is all the partners’ ambition’ (MCC3)
	3.13 Benefits: to keep tobacco on the agenda	‘But just as importantly for me it was about building the capacity, the knowledge, the understanding amongst local partners as to why they should be doing stuff around illicit tobacco beyond the official 3 years of this Programme’ (Health2) ‘And I think what focusing on illicit tobacco is doing is also keeping tobacco issues per say on the agenda of localities’ (Health2) ‘I hope we’ll see this much more on the agenda of local authorities and PCTs as an area that they have to tackle’ (MCC2)

	3.14 Benefits: to increase research in illicit tobacco	‘And I think the qualitative and quantitative research that has been done with the public to understand their levels of awareness and their attitudes to illicit tobacco. I think that is a really fantastic baseline for the Programme’ (Health3)
	3.15 Benefits: to test a marketing campaign	‘And we will also have tried a marketing and communications strategy to both shift public attitudes and perceptions and also increase the sharing of intelligence’ (Health2)
4. Relevance of the Programme’s objectives to stakeholders	4.1 Difficulty remembering the Programme’s key objectives	<p>‘[...] I’m not even going to try, I just think I could probably, if I closed my eyes I could probably visualise the PowerPoint in front of me and get them out’ (Health3)</p> <p>‘Erm...hang on a second. There’s building partnerships, which is obviously sort of various agencies working together, Information sharing, Marketing and communications, Around assessing progress. Oh goodness, that’s as far as I can remember, actually off the top of my head (MCC2)</p> <p>‘I have no clue what they are’ (National Enforcement Agency4)</p> <p>‘Then there are several which are grouped which are about enforcement and building, basically about building that enforcement infrastructure. And there is another one that links into that and I can’t remember what the title of it is. But there are 3 which pretty much link together’ (MCC3)</p> <p>‘I mean one of them is to evaluate isn’t it which ...’ (National Enforcement Agency3)</p> <p>‘No I can’t. We just went through them in the meeting. I’ll have to find them’ (National Enforcement Agency2)</p> <p>‘As I say I’ve been away for two months and I’ve just come back last week so you must forgive me I’ve forgotten some of the objectives’ (Health1)</p> <p>‘I can’t remember off the top of my head, I couldn’t not for the time, not at the moment’ (National Enforcement Agency1)</p> <p>‘No I can’t reel them off, but I know roughly what they are’ (Local Enforcement Agency2)</p>
	4.2 All Programme objectives relevant to stakeholders to some extent	<p>‘Yes’ (Health2)</p> <p>‘What do I think are relevant; I think they are all relevant to me. Cos I think...I do feel that as Regional tobacco policy managers we do have a real leadership role across the whole Programme’ (Health3)</p> <p>‘I think all of them are really. Because even on the information sharing protocol you know we have to work alongside say the HMRC communications leads who are heavily involved in the activity’ (MCC2)</p> <p>‘There is a very very clear, very hands on remit for marketing and communications in the three regions at a Programme coordination level. But actually we should be involved with all 8 objectives’ (MCC3)</p> <p>‘But actually in reality all of them are relevant, all of them are relevant’ (Local Enforcement Agency3)</p>

		‘All of them’ (Local Enforcement Agency5)
	4.3 Partner organisations focus on certain objectives more than others	<p>‘Well probably the relationships are the one. I think that really is as far as I’m concerned’ (National Enforcement Agency4)</p> <p>‘Well there’s the multi-agency approach is very very important for us. And the profile of the illicit tobacco. That again as long as the profile is high, we can get intelligence which is obviously absolutely key to our work’ (National Enforcement Agency2)</p> <p>‘The enforcement, obviously as trading standards I’ve got an enforcement background and in a way I’m looking to stimulate and promote enforcement activities around illicit tobacco, so that’s the key objective for us really, the enforcement is recognised as a crucial role in this’ (Local Enforcement Agency1)</p> <p>‘I think probably three groups, which I think cross 2 or 3 of the 8 objectives’ (Local Enforcement Agency2)</p> <p>‘Well I suppose the only ones I really can remember that am concerned with really is the marketing and communication side, the stakeholder side and then there’s the training and education element as well, which I’ve been involved with those’ (MCC1)</p>
	4.4 Working with businesses low on the Programme’s agenda	<p>‘The next one is around work places. And to be honest we haven’t really done anything in the north east around this one. Because I’ve kind of kept thinking we’ve got other things to sort out before we start looking at corporate policies’ (Health2)</p> <p>‘If there is any one area that is perhaps less of a priority at the moment it could be said to be the working with business one, because that is almost like a sub priority’ (Local Enforcement Agency5)</p> <p>‘And that actually it’s funny, because working with businesses is beginning to rise up the agenda. But we acknowledge that it’s one of the ones’ we’ve done probably the least on so far’ (MCC3)</p> <p>I think one area that we haven’t had time to get into is the liaising with businesses. We really have only scratched the surface on that. That could be a barrier as its one of the objectives that just haven’t been started and is a potential source of information that hasn’t been tapped into yet’ (Local Enforcement Agency2)</p>
5. Thoughts on the overall management of the Programme	5.1 Professional/managed excellently	<p>‘I think it’s extremely good. I think it’s a very very tight management. I think it’s very very good. There are some very very talented people who are really driving this Programme forward and had to. And I think it’s had to be...For the level of accountability and expectations that exist around the Programme’ (MCC2)</p> <p>‘I think it’s very good, very professional, yes’ (National Enforcement Agency2)</p> <p>‘I think the Programme has been managed excellently’ (Local Enforcement Agency5)</p>
	5.2 Excellent Programme	‘I think without their (RTPMs) personal input into this we wouldn’t be as advanced as we

	management due to Regional tobacco policy managers (RTPM)	currently are' (National Enforcement Agency3) 'But working together, I don't think we would be at the point we are now without the RTPMs' (Health3) I think it's worked remarkably well and think a lot of that is down to the...not solely but I think probably mainly down to the dedication and the commitment of the RTPMs (MCC3) 'I think it's really driven by the DH, the smokefree policy managers, Andrea in the NW and Ailsa in the NE and it really is driven by them. And I think if they weren't so positive towards it, I don't know whether it'll be moving so fast. But yes they really do push it' (Local Enforcement Agency3)
	5.3 Programme management only successful after the set up of the governance board	'I think it's a bit better since we've kind of managed down the number of people on the governance board' (Local Enforcement Agency4) 'In terms of the governance I think now...We've only recently got to that kind of governance structure and I think its early days but it feels right' (National Enforcement Agency3)
	5.4 Need for a Programme manager	'I think in terms of the day to day monitoring of the Programme. It's going to be crucial to have that person that oversees it and keeps track on it... This is why I think we definitely do need the Programme manager who is just keeping an eye on everything' (Health2) 'I'm concerned that we don't currently have a Programme manager in place... Cos I do think it's important that we are sharing learning across regions and we have that coordination across regions and someone with overall responsibility for what's happening' (Health3) 'But I do think that the next stage involves appointing either someone centrally or someone regionally. Who has got the time, and the skills set to really develop both packages that can be used by others and actually do leg work themselves to engage with the key stakeholders within local authorities, PCTs...' (Local Enforcement Agency4) 'We are just conscious that somebody needs to be keeping an eye on some of the Programme management aspect. Just to make sure that things don't slip through the net' (MCC3) 'The Programme really needs a Programme manager to make it sustainable' (IPM1) 'So it was really helpful to have one person, one point of contact because he is gone now, there is no one point of contact so it's not quite as easy as it was... So I think it would be better when we've got a new Programme manager' (Local Enforcement Agency4)
	5.5 Lack of a Programme manager causing greater demand on stakeholders' time	'I think probably that I hoped that by this stage I would be able to step back a little bit more and be less involved in day to day. Not that I will step back completely, but just it wouldn't be taking up so much of my time' (Health3)
	5.6 Need for a Programme administrator	'I think the recruitment of the research assistant will be crucial. It's got to be somebody that can engage and keep those relationships nurtured across the different partners' (Health2)

		‘I mean administration has been a bit patchy. Because if you haven’t got someone who’s able to provide a fair amount of admin back up then other people are having to pick those issues up and things are in danger of slipping through the net’ (MCC3)
	5.7 Need to engage stakeholders on the ground	‘Stakeholder engagement, so that is engaging with stakeholders in the interim and getting them on board and being clear on what their involvement should be around that’ (MCC1)
6. Thoughts on the progress of the Programme	6.1 Progressing well and on track	<p>‘I think it’s going really well, as I said it’s now a number one priority on trading standards agenda. On the enforcement side there is now more than enough work at the moment so now we are having to prioritize’ (Local Enforcement Agency2)</p> <p>‘I think the Programme is now progressing really well’ (Health2)</p> <p>‘I think its progressing extremely well’ (MCC2)</p> <p>‘I think its progressing well because everyone is engaged’ (National Enforcement Agency2)</p> <p>‘I think its progressing well’ (Local Enforcement Agency3)</p> <p>‘Yes, I can see it taking shape now. All the basic infrastructure has been done, so it’s now the case of getting out and doing the job really, doing the work’ (National Enforcement Agency1)</p>
	6.2 Programme not progressing well and not on track	<p>‘I think its behind because we can’t sort out the intelligence sharing [...] and we can’t agree the route of the public report’ (Local Enforcement Agency2)</p> <p>‘No I think we are a little bit behind’ (Health1)</p> <p>‘Not as well as expected to be, progressive slippage, poor communication, and sheer volume of work that other people have to manage...’ (IPM1)</p>
	6.3 Programme developing at varying speeds across the three regions	‘It’s on track in regard to Y&H because we’ve got everybody on board, we’ve got the key people on board... And I think the northeast have, but I think the northwest they still have not yet...’ (Health1)
	6.4 Programme not progressing well in relation to intelligence sharing	‘[...] and the issues of intelligence sharing, the progress has been painfully slow and there’s still work to do with that. I think it’s too early to say whether the Programme is on track to be honest’ (Local Enforcement Agency1)
	6.5 Programme not progressing well due to delays in the release of the DH’s national marketing and communications strategy	<p>‘I think we are behind in terms of where we should be on this. But we are behind and it’s completely understandable why we are because the national strategy is being delayed’ (Health2)</p> <p>‘And we’ve been waiting for an awfully long time for the DH/HMRC national marketing strategy to be finalised’ (MCC3)</p> <p>‘My main concern is the MarComms strategy. Got the Dept of Health strategy, need to interpret that into a North of England Strategy’ (IPM1)</p> <p>‘I think one of the stumbling blocks is that we really want to get going on the communication</p>

		<p>aspect of the initiative. We are waiting for the DH to decide. We don't want to take forward our communication strategy if it doesn't fit in with what is going to be happening at national level. Evidently the dh has been slow in deciding the national communication strategy' (Health1)</p> <p>'We've all being waiting for the national strategy to come out and it seems that we can't really move forward until that happens' (MCC1)</p>
	6.6 Programme at a critical implementation stage	<p>'[...] All of these things are at that point of having reached agreement on certain things. And now we are ready to actually start implementing and delivering some of these things' (National Enforcement Agency3)</p> <p>'And I think we are getting to the position now that we can really start to kick on and make a difference' (Local Enforcement Agency5)</p>
7. The Programme's achievements thus far	7.1 Profile of illicit tobacco raised	<p>'I think amongst stakeholders we have put this, not on absolutely everybody's agenda yet, but I think among the important stakeholders it now is on peoples agenda at least at a senior level' (Health3)</p> <p>'I think it's put it on the horizon much more of police forces and local authorities' (MCC2)</p> <p>'Is the fact that now certainly in Yorkshire and Humber the illicit tobacco is a key thing for all trading standards services in Yorkshire and Humber Which it wasn't in September 2008. So it's clearly put it on the agenda' (Local Enforcement Agency4)</p> <p>'And those have come about in many ways as the Programme has driven a NoE and to a great extent a national perspective on moving illicit tobacco up the agenda' (MCC3)</p> <p>'So certainly in the broader sense the profile has been raised' (National Enforcement Agency2)</p> <p>'It's really helped to heighten the awareness of illicit tobacco at senior level' (Local Enforcement Agency3)</p> <p>'We've got it as a regional priority for trading standards. It's increasingly a priority for local trading standards departments' (Local Enforcement Agency5)</p>
	7.2 Created awareness of illicit tobacco	<p>'So the awareness of issues around illicit tobacco has increased' (Local Enforcement Agency1)</p> <p>'A great deal of awareness raising, very successful awareness raising' (Local Enforcement Agency2)</p>
	7.3 Successful joint enforcement work due to the Programme's partnership	<p>'It has enabled quite a lot of joint working to take place in terms of enforcement activities, now that's really good' (Local Enforcement Agency3)</p> <p>'But I think we've achieved a phenomenal amount And I think that the fact that we have got joint enforcement activity happening in every region and there is now a willingness to share intelligence and to [...]' (Health3)</p> <p>'I have some examples of enforcement action that has been taken, so seizures, we've started doing that already in Y&H. We've had some high profile operations that we've done and we</p>

		<p>have promoted that in the media so that's leading to further intelligence that is coming in' (Local Enforcement Agency1)</p> <p>'And now in my own authority for instance we had customs officers and TS officers sat around the table yesterday discussing common targets and planning some joint enforcement. So that's a success and that was not happening two years ago' (Local Enforcement Agency5)</p> <p>'Well, no we've started doing much more enforcements, considerable amount of enforcements. Colleague's out today with customs and she was out a few weekends with police' (Local Enforcement Agency2)</p>
	7.4 Development of an information sharing protocol	<p>'I think the closer working protocol between LACORS and HMRC which is meant to be the mechanism for supporting all of the intelligence sharing and enforcement [...]' (Health3)</p> <p>'I think it's made great achievements in terms of information sharing protocols between the two organisations who are responsible for enforcing it, Trading Standards and HMRC' (MCC2)</p>
	7.5 Given direction on tackling illicit tobacco	<p>'Before illicit tobacco wasn't really thought – well it was key within people's tobacco control strategies but nobody knew how to deliver on it. So this is given us a real chance and guidance on how we can deliver on that aspect around reducing tobacco consumption by reducing the supply of illicit tobacco which undermines all the pricing that we push forward with tobacco products' (MCC1)</p> <p>'Us having kind of done some of the work around helping to develop protocols for ways to work together etc' (Health3)</p> <p>'And I think it's really established the most in depth benchmark so far [...]' (MCC2)</p>
	7.6 Getting resources into the enforcement agencies	<p>'I think it's fantastic that through HMRC and through Trading Standards there's been growing and dedicated resource in terms of time and staff dedicated to the issue' (MCC3)</p> <p>'It's gotten a lot of additional resources into trading standards and that's an achievement because without it they wouldn't stand any chance of achieving the objectives. That is an achievement in its self really' (Local Enforcement Agency1)</p>
	7.7 Programme has achieved a lot of its goals already	<p>'But I think we have achieved a huge amount' (Health3)</p> <p>I think it's achieved a huge amount in terms of coming up with template organisations, with building a lot of partnerships, with beginning to raise awareness amongst some key audiences such as pcts, local authorities and so on' (MCC3)</p> <p>'So I think progress has been excellent and we have achieved a great deal so far' (Local Enforcement Agency5)</p> <p>'I think it already has achieved a lot of the goals it set out to do' (MCC1)</p>
8. Learning from the Programme	8.1 Increased knowledge on illicit tobacco	<p>'I've learnt loads about illicit tobacco' (Health3)</p> <p>'I've learnt an awful lot about illicit tobacco. I've learnt that it's a major social problem facing communities' (MCC2)</p>

		<p>‘I didn’t actually know just how prevalent illicit tobacco is until I started getting immersed in this. I didn’t know much about the way it’s such a huge financial operation and the links to crime and terrorism’ (MCC3)</p> <p>‘I’ve learnt a huge amount about illicit tobacco, funnily enough, not surprisingly’(Local Enforcement Agency3)</p> <p>‘I have learnt more about what the counterfeit cigarettes, how they are made in china and so forth, how they are smuggled and what other countries are doing about it. So I’ve learnt a lot about the topic itself’ (Health1)</p>
	8.2 Increased awareness and knowledge of how the other agencies work	<p>‘I’ve learnt an awful lot about how different organisations work’ (MCC2)</p> <p>‘I’ve learnt a lot about the health service and how to deal with people in the health side. Which is really interesting and useful’ (Local Enforcement Agency4)</p> <p>‘I think we all have, as I’ve been involved in the Programme for some time now, a very good understanding of all of our different objectives. The way that we are organized, what our priorities are, some of our limitations and I think having that understanding enables to work a lot better together’ (National Enforcement Agency3)</p> <p>‘Yes, a lot because I didn’t really understand all the things that trading standards did. I didn’t appreciate the breath of the stop smoking....The department of health side of it at all. Really didn’t realise the extent of that’ (National Enforcement Agency2)</p> <p>‘I’ve learnt more about trading standards and I’ve learnt what they are good at, their range, their complete diverse range of things and areas of responsibility. And how they operate, I’ve learnt a wee bit about that’ (National Enforcement Agency1)</p> <p>‘Yes I’ve learnt a lot about how other organisations work’ (Local Enforcement Agency2)</p>
	8.3 The impact good organisation and management of a Programme can have on a very complex issue	<p>‘I think what I have learnt is that through good organisation and managing the process in the way this process has been managed that we can start to impact on an issue that is very complex. And so the way this has been managed has been a good learning point for me’ (Local Enforcement Agency5)</p>
	8.4 Benefits of partnership working	<p>‘Learnt about the benefits of joint working and operations’ (Local Enforcement Agency2)</p> <p>‘I understand different organisations have obviously different outcomes to achieve and tying those outcomes together to have one project is difficult. So I’ve learnt a lot about the ways you can bring people in with that’ (MCC1)</p>
	8.5 Complexity of the Programme	<p>‘It’s really complex’ (Health2)</p>
	8.6 Engaging central, regional and local	<p>And I’ve also learnt a lot about engaging central, regional, local governments, partnership working... really how to work with people’ (Local Enforcement Agency3)</p>

	governments	
	8.7 Insight into the Programme's target audience	<p>'I think something I've been able to learn is how important it is to actually raise awareness about illicit tobacco, cos it seems a lot of people don't know it's in their community or don't know it is illegal' (Health3)</p> <p>'I've learnt a lot from the inside work we've done from research with NEMS of what makes people tick, what they think, what they believe. So I have more of an insight into the target audience that we are trying to get into their brains a little bit so we can develop that marketing material' (MCC1)</p>
Partnership Working		
Themes	Sub-themes	Quotes
1. Effectiveness of the Programme's partnership	1.1 Partnership working well/operationally	<p>'I think they are working on the ground. Trading standards officers are actively sitting down with customs on a daily basis, inland detection teams to plan work, to make the most through joining up of intelligence, that kind of thing. So operationally fantastic' (Local Enforcement Agency5)</p> <p>'I think they are working really well' (Health2)</p> <p>'Yeah very much so. I think that is the most crucial aspect to it' (MCC)</p> <p>'The partnerships within our region are very strong and I'm pleased to see that this is happening' (Health)</p> <p>'In terms of customs, we've made some very good progress at the operational level and we've made some very good linkages there and that's been fantastic' (Local enforcement agency)</p> <p>"I think we actually enjoy a really good working relationship it would be unfair, it would be wrong of me to say that we don't we work very very well together there hasn't been that many issues" (National enforcement agency)</p> <p>'I think so yes. I think at a top down level it does work. And we have actually succeeded in working a lot more closely together strategically' (National Enforcement Agency1)</p>
	1.2 Partnership built on personal relationships/ needs formalising	<p>'Yes at the moment informal relationships are working but now we are formalising them. We are still at the stage where some of them rely on personal relationships, but now working towards a structured systematic approach' (Local Enforcement Agency2)</p> <p>'But in order for me to be able to say the partnerships are working well that needs to be happening in a fully officially sanctioned way, not just in an ad hoc way. It needs to be systematised, it needs to be routine and whoever steps in those shoes, it will carry on. Whereas I think it's relying to some extent on existing relationships at the moment and that will change I'm sure' (Health3)</p> <p>'You can't really make a Programme like this run on the fact that two of you get on alright and</p>

		quite enjoy after you've done one job, quite enjoy chatting over a cup of tea and a hobnob' (Local Enforcement Agency4) 'It's like oh I know so and so, it's been built on personal relationships [...] And there's nothing wrong with that, that works fine. It's just not being done on a strategic basis before and a more formal structured manner' (National Enforcement Agency1)
	1.3 Partnership not working optimally	'I think we are getting there. But I wouldn't say they are working well' (Health3)
	1.4 Commitment to making the partnerships work	'I think the only thing that I am; and I hope this comes through, is that I am very keen to work together. So you know I really do want to make the partnership work' (National Enforcement Agency4) 'Honestly, I've been in law enforcement 30 years, 35 years and you do tend to, what we've done in the past is deal with our own priorities. You do your own thing; you've got your own management silo if you like. We really need to engage and talk to one another, because at the end of the day we are all here for the same objective. Yeah it's got to be the way forward really. A single track approach doesn't work. We couldn't do it on our own; we can't do it on our own' (National Enforcement Agency1) 'There are difficulties, but I think we shouldn't give up on them. I think we need to keep working at them. Sometimes it can be very frustrating. But I think, they are absolutely vital to the success of the Programme, so we need to make sure that they do work' (Local Enforcement Agency3)
2. Areas of difficulty in partnership working	2.1 Differences in culture within agencies causing difficulties and mistrust	'And yeah because HMRC, trading standards, health etc have different perspective sometimes it takes an awfully long time to reconcile or get an agreement or as much content as you can on specific issues because it's a complex partnership and there are complex issues' (MCC3) 'HMRC have very different needs, it's a very different organisation to trading standards, what I'm used to. I think there's been some issues with different stakeholders appreciating structures, and procedures, policies of different organisations' (Local Enforcement Agency) 'Honestly, I've been in law enforcement 30 years, 35 years and you do tend to, what we've done in the past is deal with our own priorities. You do your own thing; you've got your own management silo if you like. We really need to engage and talk to one another, because at the end of the day we are all here for the same objective. Yeah it's got to be the way forward really. A single track approach doesn't work. We couldn't do it on our own; we can't do it on our own' (National Enforcement Agency1) 'Concerns of how we will get everybody committed to it, concerns of how we will get it working across 3 regions, where each region is quite different and may have different priorities

		<p>and approaches things in different ways' (Health2)</p> <p>'So in terms of the sort of the shrouds of mystery that surrounds the different organisational structures and bureaucracies within HMRC, I think that has been quite difficult to unpick really' (Health3)</p> <p>'I think there's always going to be difficulties when you bring organisations, different cultures together' (MCC1)</p>
	2.2 Lack of trust	<p>'I think the barriers to enforcement are about the barriers that exist between organisations, lack of trust between organisations, different structures of organisations, different cultures of organizations' (Health3)</p> <p>'Yeah I think the major barrier I think is possibly a historic distrust between agencies' (Local Enforcement Agency3)</p> <p>'Because we need to link with the Police and the Trading Standards. And we need to build the trust' (National enforcement agency)</p> <p>'In terms of getting enforcement agencies together and talking together and trusting one another and doing that...' (Local enforcement agency)</p> <p>'I think [...] lacks trust in other partners' (Health2)</p> <p>'There's a great deal of mistrust there at the moment, there's no doubt about it. They [Trading Standards] think we are having them over all the time. There's no point in pussy footing around that, that's what they [Trading Standards] do think and they think everything we do is really so we don't work with them. Well actually its quite the reverse I do want to work with them [Trading Standards]' (National enforcement agency4)</p>
	2.3 Identifying were partner's skills are needed and not stepping on each other's toes	<p>'I mean we've kind of agreed that our work is to deal very much with the local work because that doesn't tread on customs toes'. 'So I think we've kind of agreed that trading standards can do that because we've got the skills and we won't be treading on their toes' (Local Enforcement Agency4)</p> <p>'Our prosecution policy is unless you offend 4 times at a low level we actually won't prosecute you, there is no secret to that, we will only prosecute in the very large cases generally speaking or habitual offenders. So actually to get prosecutions at a relatively low level to let the public know there is an enforcement agency out there will do something. Because they (Trading Standards) will actually prosecute for 200 cigarettes. And I'm quite happy if trading standards want to prosecute those that we will allow them to do that because quite frankly customs is never going to prosecute them' (National Enforcement Agency)</p> <p>'And appreciating that it is a much more bureaucratic hierarchical type organisation than the nhs for example, is not difficult, but understanding where, so you can understand that on face value</p>

		<p>and recognise you have to work in a different way but unless you really really understand the complexities and who's who and what the lines of communication are and what the appropriate forms of communication are, it is just a minefield for us as Regional tobacco policy managers and I think for trading standards too' (Health3)</p> <p>'It's knowing what trading standards are about really, what their powers are and responsibilities. I think that is something we don't really understand fully yet. And again likewise what we do and what our responsibilities are, what our priorities are because they can conflict sometimes our priorities' (National Enforcement Agency1)</p>
3. Difficulty engaging other key stakeholders	3.1 The Police	<p>'I think one of the things that has come out, which is something I knew, but I think it's probably that perhaps other partners i.e. non trading standards in the Programme probably have too, is the fact that you are never going to get the likes of Police to take illicit tobacco as a main role, but what you can do is say to them there is someone out there who will deal with it if you just tell them where it is' (Local Enforcement Agency4)</p> <p>'We've had 'buy in' from the heads of the police, so now that's given us pathways into the individual authorities. We need to bring the police more on board, that's a major stakeholder that is still missing from the illicit table' (National Enforcement Agency)</p> <p>'Well they [the police] are another partner and we are developing those links very much, but again it's difficult with lots of the different police authorities. Again it's not just one focused thing like it is in HMRC' (National Enforcement Agency)</p> <p>'I suppose I envisaged the police being part of it from the start and that we had an ACPO representative within the steering group for the development of the Programme. And again that's probably about some level of naivety about the autonomy of police forces and trying to work on a regional level is a very difficult one. I mean the police have very much resisted any kind of regionalisation haven't they? And so recognising that we need to meet them as individual forces and bring them on board one at a time has been more difficult than perhaps we anticipated' (Health3)</p> <p>'And certainly I think the police forces, I think there's a bit of a missed trick perhaps I think they could get involved to be quite honest' (National Enforcement Agency4)</p> <p>'Illicit tobacco is not on the police agenda, their priorities are community safety, drugs, terrorism etc' (IPM1)</p> <p>'And that we need to bring the police more on board. That's a major stakeholder that is still missing from the illicit table' (National Enforcement Agency2)</p> <p>'I think we need to be more inclusive and engage them (thePolice) more, as I say, at my level. At the moment they are still on the periphery of it really. I think we should engage with them more' (National Enforcement Agency1)</p>

	3.2 Primary care trusts (PCTs) and Local Authorities	<p>‘The biggest challenge in getting the Chief Execs of the PCTs to commit to this initiative because they do not see illicit tobacco as a remit of health, they say it is just a local authority problem’ (Health1)</p> <p>‘I think some local authorities are very keen on tackling illicit tobacco and some aren’t. And It’s hard to understand necessarily the different..., it doesn’t seem to be dictated by smoking prevalence or by particular problems, it’s more whether it interests the councilors, the political involvement is there’ (Local Enforcement Agency3)</p> <p>‘For some reason it’s not particularly a priority and I think that is about personalities within the PCT’ (Local Enforcement Agency)</p> <p>‘Well in the other regions there seems to be a huge difficult in trying to get PCTs on board’ (Local Enforcement Agency)</p> <p>‘Yeah I think the challenges has been persuading local authorities that they can work in partnership with HMRC because there has been some suspicions in the past’ (Local Enforcement Agency3)</p>
	3.3 Tobacco control alliances	<p>‘I thing we did identify through the first meeting of the NW regional steering group was we don’t really have a very clear picture of the range of relationships with tobacco alliances’ (MCC3)</p> <p>‘I made it very clear that we could not possibly resource the tobacco smokefree alliances’ (National Enforcement Agency3)</p> <p>‘In my role I don’t work with tobacco control. Not at the moment no’ (National Enforcement Agency2)</p>
Intelligence generating and sharing		
Themes	Sub-themes	Quotes
1. Difficulties with intelligence sharing	1.1 Concerns/difficulties with intelligence sharing	<p>‘Kind of intelligence sharing issues, which I’m sure you’ll be aware that there have been challenges and issues’ (Health3)</p> <p>‘There are still some outstanding issues which hopefully will be resolved about for instance sharing intelligence. And that again comes from the different working relationships, different cultures, different legal gateways and so on’ (MCC3)</p> <p>‘I think, slight stumbling block with the intelligence sharing issue and how to generate intelligence and share’ (Local Enforcement Agency3)</p> <p>‘And in think we still have some serious issues to have to resolve there primarily around intelligence sharing’ (Local Enforcement Agency5)</p>
	1.2 National enforcement	‘And hopefully sharing the intelligence, that’s a very hard one for me because customs

	agency not willing to share intelligence	historically never really...we share with police forces, we share but it tends to be very close community actually and the thought of actually just giving out any intelligence is quite difficult' (National Enforcement Agency4) 'Basically HMRC do not want to share intelligence and if they do share it, then it is only in a very controlled fashion' (IPM1) 'And from a sharing intelligence point of view, they wouldn't share the information that comes into the hotline' (Local Enforcement Agency3)
	1.3 Willingness to share some intelligence by the national enforcement agency	'We are not going to share all the intelligence, because as with my previous answer we can't. But the low level stuff I have no problem whatsoever' (National Enforcement Agency4)
	1.4 Not all intelligence is being acted on	'[...] because actually they get a lot of information about a lot of premises. I can think of at least 2 premises in [...] that we've dealt with where someone has come back to us and said I passed this information to customs 3/6 months ago and the bloke is still selling the stuff can you do something about it?' (Local Enforcement Agency4) 'The thing that I am very concerned about within my own department is there are clusters of intelligence that are sitting there which nobody is doing anything with...Because our department is in such a way now our tasking and coordination means that we only hone in on what is seen as very very high level priorities' (National Enforcement Agency4)
	1.5 Concern that the same intelligence would be acted on twice – 'blue on blue'	'And to be honest with you my biggest worry on all of this is what we term in the trade and the police use exactly the same as well is 'blue on blue'. What we are going to end up with if we are not very careful is trading standards take such a route on some intelligence they may have and customs going down exactly the same route and us colliding somewhere in the middle. And it tends to look terribly unprofessional' (National enforcement agency)
	1.6 Local enforcement agency focus on local issues, and the national enforcement agency on national issues	'Whereas my view is that, if that's the rule well we'll deal with the more local stuff. We'll prosecute it and you use your resources to looking a little bit further upstream' (Local Enforcement Agency4)
	1.7 Success of the Programme hinges on intelligence sharing	'Those (intelligence sharing issues) need serious considerations, they need to be resolved fairly quickly otherwise the Programme won't be anything like as effective as it intends to be' (MCC3) 'So intelligence sharing is the problem which may mean that this project fails for the very reason that I outlined earlier' (Local Enforcement Agency5)
2. Secure systems	2.1 Concerns over the	'[...] they couldn't share intelligence unless it was on a secure basis and the emails that they had

needed for intelligence sharing	security of the intelligence generated	been using were on insecure networks' (IPM1) 'Because from a security point of view, obviously it's very very sensitive. And if that information was to get into the wrong hands. And it's always a major concern of a law enforcement body' (National Enforcement Agency2)
	2.2 Need for secure legal mechanisms	'But actually have to sort out the mechanics because trading standards don't have the secure systems to receive that intelligence. Until that is sorted out, even though the system's in place, it won't be easy to exchange the intelligence electronically' (National Enforcement Agency2) 'There's gateways, have we got the correct legal gateways in place to exchange information' (National Enforcement Agency1) 'And there are a whole host of different reasons why they are not actively sharing that information at the moment. Mainly legal gateway issues and that's what we are trying to resolve' (Local Enforcement Agency5) '[...] and the intelligence gathering/sharing the barrier is the physical processes of how we can share it and legally whether we can share those information' (Local Enforcement Agency2)
3. Issues with the telephone reporting line	3.1 Suggested that the hotline may not be the best way to gain intelligence	'One of the primary aims has been driving traffic to the hotline and getting people to report. And I do think that in terms of raising awareness and changing attitudes, that what we need to do is not necessarily about calling the hotline. It might be about speaking out within your community. It might be about changing, obviously people beginning to change their buying behaviour. So I don't think that reporting to the hotline is necessarily the best measure of success' (Health3)
	3.2 Customs hotline not user friendly	'I think the barriers that exist for the public in reporting through revenue and customs hotline are still there. And even if you put a neutral non branded front number on, when they get through and it is dial 1 for the revenue and customs hotline, I think that might still be a barrier for some people to report' (Health3) 'I recently made a test call to the Customs Hotline – this was not user friendly, very patronising and the call lasted 25 minutes. I don't believe that people in the community would like to use it. I did report this back to HMRC and was then sent a complaints form!' (IPM1) 'Well from a marketing point of view, the customs hotline isn't particularly consumer friendly' (Local Enforcement Agency3)
	3.3 Concern that intelligence generated by the hotline may not be fed back to the other agencies	'If we go down the route of actively publicising this issue and actively seeking information, if that information then goes into the revenue and customs system and then doesn't find its way to us then we will lose the confidence of the people that are supplying that information. And if we lose their confidence that would have impacts in a number of other ways as well' (Local Enforcement Agency5) 'But we are a bit leery about going in because there is this kind of conflict where customs are

		<p>saying it has to be their hotline and reservations about actually the intelligence sharing from them. So what's the point in...It's a bit like the saying; please put all your money in my mates bank, but my mate doesn't actually sign up to give me my money in the future' (Local Enforcement Agency4)</p> <p>'So there's a move to promote that [Customs Hotline] as the means to reporting illicit tobacco. But ensuring that the information that goes in there is then shared with other people is absolutely crucial' (Local Enforcement Agency1)</p> <p>'Things are not coming up to scambusters, police from customs and revenue. So if we are going to have one call to action which drives people to the customs and revenue hotline that information needs to feed back up and quickly' (MCC1)</p>
	3.4 Need for a contingency plan	<p>'If we go down the route of actively publicising this issue and actively seeking information, if that information then goes into the revenue and customs system and then doesn't find its way to us then we will lose the confidence of the people that are supplying that information. And if we lose their confidence that would have impacts in a number of other ways as well' (Local Enforcement Agency5)</p> <p>'There's been a huge emphasis on going down one route and trying to make that work which is good and I admire the commitment of those that are doing that. But ultimately if that doesn't deliver i feel that there needs to be a contingency plan in place to address that' (Local Enforcement Agency1)</p>
The Programme's resources		
Themes	Sub-themes	Quotes
1. Resources for individual agencies in the Programme	1.1 Concerns over how resources were allocated to individual agencies	<p>'A lot of funding for example has gone into trading standards. And therefore there are a lot more resources put into things like marketing and putting more bums on seats basically and getting more staff engaged in tobacco whereas me for example again I've only got 20 people. There's been no extra funding for us in terms of what intelligence we put in. More resources would take the squeeze out of everything because at the moment I'm squeezed and it would certainly help me if I had more resources as always I could direct more time to it, yes' (National Enforcement Agency1)</p> <p>'But even till this day I've got no idea how much money has been invested in the different parts of the Programme. It's not something that we've been consulted on' (National Enforcement Agency3)</p> <p>'Which for us is a very frustrating position to be in. If there's money to be had on illicit tobacco marketing, the question is why is that not with hmrc? Why has it gone to health?' (National</p>

		Enforcement Agency3)
2. Limited resources a challenge to the Programme	2.1 Concerns about insufficient funding being made available	<p>‘Some of the barriers could well be that enforcement goes well with this team and they actually say we actually need 2 more people and where are we going to find the money for that’ (Health2)</p> <p>‘So while we are in agreement that all intelligence should be routed through one central channel and that channel is the customs hotline. We have no additional resource to do that’ (National Enforcement Agency3)</p>
	2.2 Concerns about the limited budget of the Programme and its sustainability	<p>‘I suppose my biggest concern is about sustainability and what is going to happen with funding streams for next year’ (Health3)</p> <p>‘Any barriers to overcome....I think ongoing commitment financially to it as a Programme’ (MCC2)</p>
	2.3 Time - a limited resource	<p>‘To be honest I..., the long and tall of it is that I do other work at home and in my own time which kind of compensates for spending a day at the governance board and things like that’ (Local Enforcement Agency4)</p> <p>‘And I think I’ve just had to fit it in on top of everything else. You’ve probably have gathered that I don’t really think Andréa and I work a normal kind of 37 hour week and thing. So often it’s at night time that I try to do my catching up on the illicit Programme’ (Health2)</p> <p>‘I think probably that I hoped that by this stage I would be able to step back a little bit more and be less involved in day to day. Not that I will step back completely, but just it wouldn’t be taking up so much of my time’ (Health3)</p> <p>‘So whilst for our inland detection teams it is part and parcel of their jobs. But they do oils and alcohol and money laundering. So they have their time divided... Time is a big factor’ (National Enforcement Agency3)</p> <p>‘[...] at the moment I’m being squeezed and it would certainly help me if I had more resources as always I could direct more time to it, yes’ (National Enforcement Agency1)</p>
	2.4 Ensuring individual agencies benefit financially from the Programme in order to justify their continued involvement	<p>‘Realistically to take this project forward trading standards need resources. And it’s trying to find a way to lever those resources in either some form of new money into trading standards services’ (Local Enforcement Agency4)</p>
The Programme’s Evaluation		
Themes	Sub-themes	Quotes

1. Measurement of success	1.1 Difficulty in measuring success of the programme	‘So I think we can make some difference. I just don’t know how we will successfully evaluate that over the next 18 months’ (MCC2) The interesting bit and the tricky bit and I think this probably the trickiest bit of all is how can we by 2011 track back by whatever measures we use that if smoking prevalence has fallen and fingers crossed smoking prevalence would have fallen that the activities delivered through the illicit tobacco Programme...We have the evidence base to say these aspects of the illicit tobacco Programme contributed directly to that overall reduction in smoking prevalence (MCC3)
	1.2 Success measure more than just supply	‘People tend to focus very much on sort of the quantitative type indicators; you want more intelligence, more seizures, more prosecutions’. No we don’t. We want more people to stop buying illicit tobacco. You cannot continue to invest huge amounts in enforcement activities, that’s why your performance indicators cannot all be quantity ones, you have to look for a shift in public behaviour’ (National Enforcement Agency3) ‘But I think the definition of success is broader than just reducing demand and supply of illicit tobacco’ (Health2)
	1.3 Success of the Programme may then divert resources away from illicit tobacco	‘And one of the obstacles will be, if we are performing very well on tobacco, not as well on alcohol and oils, then they will prioritize alcohol and oils ahead of tobacco’ (National Enforcement Agency3)
2. Key Performance Indicators (KPI)	2.1 Difficulties in developing the KPIs	‘I think some of the tricky things we are going to have to bottom out are the KPIs, because we are not all on the same page on that, that’s quite clear’ (Health2) ‘It’s going to be very difficult to pick some measures. One of them is the price of illicit tobacco but Its picking something we actually have control over. KPIs could become the target rather than the work that goes with it’ (Local Enforcement Agency2)
	2.2 Delay in development of the KPIs	‘I think, there’s some KPIs which are being developed as part of the Programme, and i think it’s important that that gets underway as soon as possible really so we know how the Programme is going to be measured and evaluated’ (Local Enforcement Agency1)
	2.3 Concern that KPIs are focused on outputs instead of outcomes	‘What it was talking about were outputs rather than outcomes’ (MCC3)

Appendix 6.1: Smoking Toolkit Study Questionnaire used for data collection in 2007-8 and 2010-11

Blue = All respondents

Green = Current smokers (q632a1 = 1/2/3)

Purple = Smoked in past year (q632a1 = 1/2/3/4)

Orange = Current cigarette smokers and recent ex-smokers (q632a2 = 1/2/4)

And can I just check ...

Question 101

1101L1

SHOW SCREEN

Q632a1

Which of the following best applies to you?

- 1 ☐ 1. I smoke cigarettes (including hand-rolled) every day
- 2 ☐ 2. I smoke cigarettes (including hand-rolled), but not every day
- 3 ☐ 3. I do not smoke cigarettes at all, but I do smoke tobacco of some kind (eg. pipe or cigar)
- 4 ☐ 4. I have stopped smoking completely in the last year
- 5 ☐ 5. I stopped smoking completely more than a year ago
- 6 ☐ 6. I have never been a smoker (ie. smoked for a year or more)
- 9 ☐
- 7 ☐ DK

If [Q101 , 5 , 6 , 7] go to end of questionnaire

If [Q101 , 1 TO 3] otherwise continue at question 76301

Question 102

1102L1

SHOW SCREEN

Q632a2

Are you currently trying to cut down on how much you smoke but not currently trying to stop?

- 1 ☐ 1. Yes
- 2 ☐ 2. No
- 9 ☐
- 3 ☐ DK

Question 537

Multiple answers allowed

Open ended answer is written as a bitmap

Question only asked, if [Q102 , 1]

1103L100

SHOW SCREEN - MULTI CHOICE

Q632e37

Which, if any, of the following are you currently using to help you cut down the amount you smoke?

PROBE FULLY : Which others? PROBE UNTIL RESPONDENT SAYS NO OTHERS
PLEASE WRITE IN OTHER ANSWERS CAREFULLY AND USE CAPITAL LETTERS

- 1 ☐ 1. Nicotine gum
- 2 ☐ 2. Nicotine replacement lozenges\tablets
- 3 ☐ 3. Nicotine replacement inhaler
- 4 ☐ 4. Nicotine replacement nasal spray
- 5 ☐ 5. Nicotine patch
- 6 ☐ 6. Other
- 99 ☐
- 98 ☐ DK
- 97 ☐ N

Question 6302

Multiple answers allowed

Open ended answer is written as a bitmap

1510L100

SHOW SCREEN - MULTI CHOICE

q632e1

Do you regularly use any of the following in situations when you are not allowed to smoke?

PROBE FULLY : Which others? PROBE UNTIL RESPONDENT SAYS NO OTHERS
PLEASE WRITE IN OTHER ANSWERS CAREFULLY AND USE CAPITAL LETTERS

- 1 ☐ 1. Nicotine gum
- 2 ☐ 2. Nicotine lozenge
- 3 ☐ 3. Nicotine patch
- 4 ☐ 4. Nicotine inhaler\inhalator
- 5 ☐ 5. Another nicotine product
- 6 ☐ 6. Other
- 99 ☐
- 98 ☐ DK
- 7 ☐ N

If [Q537 , 1 TO 5 or Q6302 , 1 TO 5] otherwise continue at question 551

Question 6303

User defined button : 997 "Not every day but at least once a week"

User defined button : 996 "Not every day and less often than once a week"

Question only asked, if [Q537 , 1 TO 5 or Q6302 , 1 TO 5]

1610L3

SHOW SCREEN

q632e67

How many times per day on average do you use a nicotine replacement product?

If you do not use it every day, do you use a nicotine replacement product at least once a week or less often than once a week?

PLEASE ENTER NUMBER OF TIMES OF ALL PRODUCTS USED E.G. NUMBER OF

PATCHES AND\OR NUMBER OF PIECES OF GUM

INTERVIEWER: IF RESPONDENT SAYS 'NOT EVERY DAY BUT AT LEAST ONCE A WEEK' OR 'NOT EVERY DAY AND LESS OFTEN THAN ONCE A WEEK'

PLEASE CODE USING BUTTONS ABOVE.

If [Q537 , 1 TO 5 or Q6302 , 1 TO 5] otherwise continue at question 88001

If [ANS1 < 100 and ANS1 > 0 or ANS1 = "DK" or ANS1 = "dk" or ANS1 = " "] continue at question 88001

Question 8801

PLEASE NOTE YOU NEED TO ENTER A NUMBER
BETWEEN 1 AND 99 OR 'DK'.

HOWEVER YOU ENTERED:

<Question 6303>

PLEASE TAB 'OK' TO AMEND

Question 6304

Question only asked, if [Q537 , 1 TO 5 or Q6302 , 1 TO 5]

1613L1

SHOW SCREEN

q632e68

How long have you used nicotine replacement products for?

- 1 ☐ 1. Less than one week
- 2 ☐ 2. One to six weeks
- 3 ☐ 3. More than six weeks up to twelve weeks
- 4 ☐ 4. More than twelve weeks
- 9 ☐
- 5 ☐ DK

Question 5381

Multiple answers allowed

2262L100

SHOW SCREEN - MULTI CHOICE

Q632e38a

Which of the following apply to you? Please choose all that apply.

PROBE FULLY: Which others?

- 1 ☐ 1. I am worried that smoking is harming my health right now
- 2 ☐ 2. I have had enough of being a smoker
- 3 ☐ 3. I am worried smoking will harm my health in the future
- 4 ☐ 4. Smoking is costing me too much money
- 5 ☐ 5. It is getting too difficult to smoke these days
- 6 ☐ 6. I am worried about the effect of smoking on my family and loved ones
- 9 ☐
- 98 ☐ DK
- 97 ☐ N

Question 5382

Multiple answers allowed

2462L100

SHOW SCREEN - MULTI CHOICE

Q632e38b

And which of the following apply to you? Please choose all that apply.

PROBE FULLY: Which others?

- 1 ☐ 1. I am confident I could stop smoking if I tried
- 2 ☐ 2. People I care about want me to stop smoking
- 3 ☐ 3. I enjoy smoking
- 4 ☐ 4. I like being a smoker
- 5 ☐ 5. I am addicted to smoking
- 9 ☐
- 98 ☐ DK
- 97 ☐ N

Question 5383

Multiple answers allowed
2662L100

SHOW SCREEN - MULTI CHOICE

Q632e38c

And which of the following apply to you? Please choose all that apply.

PROBE FULLY: Which others? PROBE UNTIL RESPONDENT SAYS NO OTHER

- 1 ☐ 1. I want to stop smoking
- 2 ☐ 2. I ought to stop smoking
- 3 ☐ 3. I intend to stop smoking soon
- 9 ☐
- 98 ☐ DK
- 97 ☐ N

Question 545

1303L1

SHOW SCREEN

Q632e45

Which of the following best describes you?

- 1 ☐ 1. I REALLY want to stop smoking and intend to in the next month
- 2 ☐ 2. I REALLY want to stop smoking and intend to in the next 3 months
- 3 ☐ 3. I REALLY want to stop smoking but I don't know when I will
- 4 ☐ 4. I want to stop smoking and hope to soon
- 5 ☐ 5. I want to stop smoking but haven't thought about when
- 6 ☐ 6. I think I should stop smoking but don't really want to
- 7 ☐ 7. I don't want to stop smoking
- 9 ☐
- 8 ☐ DK

Question 6314

1614L4

SHOW SCREEN

q632e14

On average about how much per week do you think you spend on cigarettes or tobacco?

Please only answer this if you are fairly confident that you know.

IF NECESSARY SAY: Please give your answer to the nearest pound, we do not need an exact figure.

If [ANS2 < 501 and ANS2 > 0 or ANS2 = "DK" or ANS2 = "dk"] continue at question 88002

Question 8802

PLEASE NOTE YOU NEED TO ENTER A NUMBER BETWEEN 1 AND 500 OR 'DK'.
HOWEVER YOU ENTERED:

<Question 6314>
PLEASE TAB 'OK' TO AMEND

If [Q101 , 1 , 2 , 4] otherwise continue at question 6311

Question 6301

1618L1

SHOW SCREEN

q632x1

How many cigarettes <?> you usually smoke?

INTERVIEWER: Please allow respondent to choose how they would prefer to answer.

NOTE: If respondent says they do not smoke every month, choose 'per month' and enter '0' at next question.

- 1 ☐ 1. Per day
- 2 ☐ 2. Per week
- 3 ☐ 3. Per month
- 9 ☐
- 4 ☐ DK

Question 6305

Question only asked, if [Q6301 , 1]

1619L4

SHOW SCREEN

q632a9

How many cigarettes per day <?> you usually smoke?

INTERVIEWER: If respondent says 'Don't know', encourage them to give their best estimate

If [Q6301 , 1] otherwise continue at question 88003

[ANS3 < 101 and ANS3 > 0 or ANS3 = "0" or ANS3 = "00" or ANS3 = "000" or ANS3 = "0000" or ANS3 = "DK" If or ANS3 = "dk"] continue at question 88003

Question 8803

PLEASE NOTE YOU NEED TO ENTER A NUMBER
LESS THAN 100 OR 'DK'.

HOWEVER YOU ENTERED:

<Question 6305>

PLEASE TAB 'OK' TO AMEND

If [Q6305 = 9998] continue at question 6307

Question 6306

Question only asked, if [Q6305 < 0]

1623L4

SHOW SCREEN

q632e15

How many of these do you think are hand-rolled?

INTERVIEWER: If respondent says 'Don't know', encourage them to give their best estimate. You will not be able to type in a number larger than the previous question.

If [Q6305 < 0] otherwise continue at question 88004

[ANS4 < 101 and ANS4 > 0 or ANS4 = "0" or ANS4 = "00" or ANS4 = "000" or ANS4 = "0000" or ANS4 = "DK" If or ANS4 = "dk"] continue at question 88004

Question 8804

PLEASE NOTE YOU NEED TO ENTER A NUMBER
LESS THAN 100 OR 'DK'.

HOWEVER YOU ENTERED:

<Question 6306>

PLEASE TAB 'OK' TO AMEND

If [Q6306 > Q6305 and Q6306 < 9998] otherwise continue at question 6307

Please check this number should not be more than <Question 6305>

Question 6307

Question only asked, if [Q6301 , 2]
1627L4

SHOW SCREEN

q632a0

How many cigarettes per week <?> you usually smoke?

INTERVIEWER: If respondent says 'Don't know', encourage them to give
their best estimate

If [Q6301 , 2] otherwise continue at question 88005

[ANS5 < 701 and ANS5 > 0 or ANS5 = "0" or ANS5 = "00" or ANS5 = "000" or ANS5 = "0000" or ANS5 = "DK" If or ANS5 = "dk"] continue at question 88005

Question 8805

PLEASE NOTE YOU NEED TO ENTER A NUMBER
LESS THAN 700 OR 'DK'.

HOWEVER YOU ENTERED:

<Question 6307>

PLEASE TAB 'OK' TO AMEND

If [Q6307 = 9998] continue at question 6309

Question 6308

Question only asked, if [Q6307 < 0]
1631L4

SHOW SCREEN

q632e16

How many of these do you think are hand-rolled?

INTERVIEWER: If respondent says 'Don't know', encourage them to give their
best estimate. You will not be able to type in a number larger than the
previous question.

If [Q6307 < 0] otherwise continue at question 88006

[ANS6 < 701 and ANS6 > 0 or ANS6 = "0" or ANS6 = "00" or ANS6 = "000" or ANS6 = "0000" or ANS6 = "DK" If or ANS6 = "dk"] continue at question 88006

Question 8806

PLEASE NOTE YOU NEED TO ENTER A NUMBER
LESS THAN 700 OR 'DK'.

HOWEVER YOU ENTERED:

<Question 6308>

PLEASE TAB 'OK' TO AMEND

If [Q6308 > Q6307 and Q6308 <> 9998] otherwise continue at question 6309

Please check this number should not be more than <Question 6307>

Question 6309

Question only asked, if [Q6301 , 3]
1635L5

SHOW SCREEN

q632b1

How many cigarettes per month <?> you usually smoke?

INTERVIEWER: If respondent says 'Don't know', encourage them to give their best estimate NOTE: If respondent says they do not smoke every month, enter '0'

If [Q6301 , 3] otherwise continue at question 88007

[ANS7 < 3501 and ANS7 > 0 or ANS7 = "0" or ANS7 = "00" or ANS7 = "000" or ANS7 = "0000" or ANS7 = If "00000" or ANS7 = "DK" or ANS7 = "dk"] continue at question 88007

Question 8807

PLEASE NOTE YOU NEED TO ENTER A NUMBER

LESS THAN 3500 OR 'DK'.

HOWEVER YOU ENTERED:

<Question 6309>

PLEASE TAB 'OK' TO AMEND

If [Q6309 = 99998] continue at question 6311

Question 6310

Question only asked, if [Q6309 <> 0]
1640L5

SHOW SCREEN

q632e17

How many of these do you think are hand-rolled?

INTERVIEWER: If respondent says 'Don't know', encourage them to give their best estimate. You will not be able to type in a number larger than the previous question.

If [Q6309 <> 0] otherwise continue at question 88008

[ANS8 < 3501 and ANS8 > 0 or ANS8 = "0" or ANS8 = "00" or ANS8 = "000" or ANS8 = "0000" or ANS8 = If "00000" or ANS8 = "DK" or ANS8 = "dk"] continue at question 88008

Question 8808

PLEASE NOTE YOU NEED TO ENTER A NUMBER

LESS THAN 3500 OR 'DK'.

HOWEVER YOU ENTERED:

<Question 6310>

PLEASE TAB 'OK' TO AMEND

If [Q6310 > Q6309 and Q6310 <> 99998] otherwise continue at question 6311

Please check this number should not be more than <Question 6309>

Question 6311

1645L1

SHOW SCREEN

q632b2

How soon after you wake up <?> you light up?

- 1 ☐ 1. Within 5 minutes
- 2 ☐ 2. 6 - 30 minutes
- 3 ☐ 3. 31 - 60 minutes
- 4 ☐ 4. More than 60 minutes
- 9 ☐
- 5 ☐ DK

Question 6312

Multiple answers allowed

1646L100

SHOW SCREEN - MULTI CODE

q632x4a

Has your GP spoken to you about smoking in the past year
(i.e. last 12 months)?

INTERVIEWER: PLEASE CODE ALL THAT APPLY

- 1 ☐ 1. Yes, he\she suggested that I go to a specialist stop smoking advisor or group
- 2 ☐ 2. Yes, he\she suggested that I see a nurse in the practice
- 3 ☐ 3. Yes, he\she offered me a prescription for Champix, Zyban, a nicotine patch,
nicotine gum or another nicotine product
- 4 ☐ 4. Yes, he\she advised me to stop but did not offer anything
- 5 ☐ 5. Yes, he\she asked me about my smoking but did not advise me to stop
smoking
- 6 ☐ 6. No, I have seen my GP in the last year but he\she has not spoken to me about
smoking
- 7 ☐ 7. No, I have not seen my GP in the last year
- 99 ☐
- 98 ☐ DK\CR

Question 6342

Question only asked, if [Q6312 , 1 TO 5]

2261L1

SHOW SCREEN

Q632x4b

Did you express any interest in stopping or taking up the offer of help?

- 1 ☐ 1. Yes
- 2 ☐ 2. No
- 9 ☐
- 3 ☐ CR

Question 6313

1746L1

SHOW SCREEN

q632x5

How much of the time have you felt the urge to smoke in
the past 24 hours?

- 1 ☐ 1. Not at all
- 2 ☐ 2. A little of the time
- 3 ☐ 3. Some of the time
- 4 ☐ 4. A lot of the time
- 5 ☐ 5. Almost all of the time
- 6 ☐ 6. All the time
- 9 ☐
- 7 ☐ DK

Question 6320

Question only asked, if [Q6313 , 2 TO 6]
1747L1

SHOW SCREEN

q632x7

In general, how strong have the urges to smoke been?

- 1 ☐ 1. Slight
- 2 ☐ 2. Moderate
- 3 ☐ 3. Strong
- 4 ☐ 4. Very strong
- 5 ☐ 5. Extremely strong
- 9 ☐
- 7 ☐ DK

Question 552

Question only asked, if [Q101 , 1 TO 4]
4119L1

SHOW SCREEN

Q632e49

How much do you agree that more people are stopping smoking these days?

- 1 ☐ 1. Agree strongly
- 2 ☐ 2. Tend to agree
- 3 ☐ 3. Neither agree nor disagree
- 4 ☐ 4. Tend to disagree
- 5 ☐ 5. Strongly disagree
- 6 ☐ 6. Not applicable
- 9 ☐
- 7 ☐ DK

Question 207

1305L4

SHOW SCREEN

Q632b7

How many serious attempts to stop smoking have you made in the last 12 months?

By serious attempt I mean you decided that you would try to make sure you never smoked again. Please include any attempt that you are currently making and please include any successful attempt made within the last year.

If [ANS9 = "0" or ANS9 = "00" or ANS9 = "000" or ANS9 = "0000" or ANS9 = "DK" or ANS9 = "dk"]
continue at question 76501

[ANS9 < 151 and ANS9 > 0 or ANS9 = "0" or ANS9 = "00" or ANS9 = "000" or ANS9 = "0000" or ANS9 = "DK" If or ANS9 = "dk"] continue at question 88009

Question 8809

PLEASE NOTE YOU NEED TO ENTER A NUMBER LESS THAN 150 OR 'DK'.
HOWEVER YOU ENTERED:

<Question 207>

PLEASE TAB 'OK' TO AMEND

If [Q207 > 0 and not Q207 , 9998] otherwise continue at question 2222

Question 1111

Question only asked, if [not Q207 , 9998]

The next few questions relate to the most recent serious quit attempt
to stop smoking you made in the last 12 months ...

Question 208

1309L1

SHOW SCREEN

Q632b8

How long ago did your most recent serious quit attempt start?

By most recent, we mean the last time you tried to quit.

- 1 ☐ 1. In the last week
- 2 ☐ 2. More than a week and up to a month
- 3 ☐ 3. More than 1 month and up to 2 months
- 4 ☐ 4. More than 2 months and up to 3 months
- 5 ☐ 5. More than 3 months and up to 6 months
- 6 ☐ 6. More than 6 months and up to a year
- 9 ☐
- 7 ☐ DK\CR

Question 6315

1748L2

SHOW SCREEN

q632b9

How long did your most recent serious quit attempt last before
you went back to smoking?

- 1 ☐ 1. Still not smoking
- 2 ☐ 2. Less than a day
- 3 ☐ 3. Less than a week
- 4 ☐ 4. More than 1 week and up to a month
- 5 ☐ 5. More than 1 month and up to 2 months
- 6 ☐ 6. More than 2 months and up to 3 months
- 7 ☐ 7. More than 3 months and up to 6 months
- 8 ☐ 8. More than 6 months and up to a year
- 99 ☐
- 98 ☐ DK\CR

Question 540

Multiple answers allowed

Open ended answer is written as a bitmap

1310L100

SHOW SCREEN - MULTI CHOICE

Q632e40

Which, if any, of the following did you try to help you stop smoking
during the most recent serious quit attempt?

INTERVIEWER: PLEASE CODE ALL THAT APPLY

PROBE FULLY: Which others?

PLEASE WRITE IN OTHER ANSWERS CAREFULLY AND USE CAPITAL
LETTERS

PLEASE SCROLL DOWN TO SEE FULL LIST OF RESPONSES

- 1 ☐ 1. Nicotine replacement product (eg. patches\gum\inhaler) without a prescription
- 2 ☐ 2. Nicotine replacement product on prescription or given to you by a health professional
- 3 ☐ 3. Zyban (bupropion)
- 4 ☐ 4. Champix (varenicline)
- 5 ☐ 5. Attended a Stop Smoking group
- 6 ☐ 6. Attended one or more Stop Smoking one-to-one counselling\advice\support session\s
- 7 ☐ 7. Phoned a Smoking Helpline
- 8 ☐ 8. A book or booklet
- 9 ☐ 9. Visited www.nhs.uk\smokefree website
- 10 ☐ 10. Visited a website other than Smokefree
- 11 ☐ 11. Hypnotherapy
- 12 ☐ 12. Acupuncture
- 13 ☐ 13. Other
- 99 ☐
- 98 ☐ DK
- 97 ☐ N

Question 6318

1851L1

SHOW SCREEN

q632c1

Did you cut down the amount you smoked before trying to stop completely at your most recent serious quit attempt?

- 1 ☐ 1. Cut down first
- 2 ☐ 2. Stopped without cutting down
- 9 ☐
- 3 ☐ DK\CR

Question 6319

1852L1

SHOW SCREEN

q632c2

Which one of the following applies to your most recent serious quit attempt?

- 1 ☐ 1. I planned the quit for later the same day or for a date in the future
- 2 ☐ 2. I started the quit attempt the moment I made the decision I was going to stop
- 9 ☐
- 3 ☐ DK

Question 331

Multiple answers allowed

Open ended answer is written as a bitmap

1410L100

SHOW SCREEN - MULTI CHOICE

Q632c3a

Which of the following do you think contributed to you making the most recent quit attempt?

INTERVIEWER: PLEASE CODE ALL THAT APPLY

PROBE FULLY: Which others?

PLEASE WRITE IN OTHER ANSWERS CAREFULLY AND USE CAPITAL

LETTERS

PLEASE SCROLL DOWN TO SEE FULL LIST OF RESPONSES

- 1 ☐ 1. Advice from a GP\health professional
- 2 ☐ 2. TV advert for a nicotine replacement product
- 3 ☐ 3. Government TV\radio\press advert
- 4 ☐ 4. Hearing about a new stop smoking treatment
- 5 ☐ 5. A decision that smoking was too expensive
- 6 ☐ 6. Being faced with smoking restrictions
- 7 ☐ 7. I knew someone else who was stopping
- 8 ☐ 8. Seeing a health warning on a cigarette packet
- 9 ☐ 9. Being contacted by my local NHS Stop Smoking Services
- 10 ☐ 10. Health problems I had at the time
- 11 ☐ 11. A concern about future health problems
- 12 ☐ 12. Attending a local stop smoking activity or event
- 13 ☐ 13. Something said by family\friends\children
- 14 ☐ 14. A significant birthday
- 15 ☐ 15. Other
- 99 ☐
- 98 ☐ DK\CR

If [Q207 > 1] otherwise continue at question 3333

Question 4444

Question only asked, if [not Q207 , 9998]

The next few questions relate to the second most serious quit attempt to stop smoking you made in the last 12 months....

Question 6330

Question only asked, if [Q207 > 0 and Q207 < 151]
1853L1

SHOW SCREEN

q632c4

How long ago did your second most recent serious quit attempt start?

By second most recent, we mean the time BEFORE the last time you tried to quit.

- 1 ☐ 1. In the last week
- 2 ☐ 2. More than a week and up to a month
- 3 ☐ 3. More than 1 month and up to 2 months
- 4 ☐ 4. More than 2 months and up to 3 months
- 5 ☐ 5. More than 3 months and up to 6 months
- 6 ☐ 6. More than 6 months and up to a year
- 9 ☐
- 7 ☐ DK\CR

Question 6331

Question only asked, if [Q207 > 0 and Q207 < 151]
1854L1

SHOW SCREEN

q632c5

How long did your second most recent serious quit attempt last before you went back to smoking?

- 1 ☐ 1. Less than a day
- 2 ☐ 2. Less than a week
- 3 ☐ 3. More than 1 week and up to a month
- 4 ☐ 4. More than 1 month and up to 2 months
- 5 ☐ 5. More than 2 months and up to 3 months
- 6 ☐ 6. More than 3 months and up to 6 months
- 7 ☐ 7. More than 6 months and up to a year
- 9 ☐
- 8 ☐ DK\CR

Question 6332

Multiple answers allowed

Open ended answer is written as a bitmap

Question only asked, if [Q207 > 0 and Q207 < 151]

1855L100

SHOW SCREEN - MULTI CHOICE

Q632e41

Which, if any, of the following did you try to help you stop smoking during the second most recent serious quit attempt?

INTERVIEWER: PLEASE CODE ALL THAT APPLY

PROBE FULLY: Which others?

PLEASE WRITE IN OTHER ANSWERS CAREFULLY AND USE CAPITAL LETTERS

PLEASE SCROLL DOWN TO SEE FULL LIST OF RESPONSES

- 1 ☐ 1. Nicotine replacement product (eg. patches\gum\inhaler) without a prescription
- 2 ☐ 2. Nicotine replacement product on prescription or given to you by a health professional
- 3 ☐ 3. Zyban (bupropion)
- 4 ☐ 4. Champix (varenicline)
- 5 ☐ 5. Attended a Stop Smoking group
- 6 ☐ 6. Attended one or more Stop Smoking one-to-one counselling\advice\support session\s
- 7 ☐ 7. Phoned a Smoking Helpline
- 8 ☐ 8. A book or booklet
- 9 ☐ 9. Visited www.nhs.uk\smokefree website
- 10 ☐ 10. Visited a website other than Smokefree
- 11 ☐ 11. Hypnotherapy
- 12 ☐ 12. Acupuncture
- 13 ☐ 13. Other
- 99 ☐
- 98 ☐ DK
- 97 ☐ N

Question 6333

Question only asked, if [Q207 > 0 and Q207 < 151]

1955L1

SHOW SCREEN

q632c7

Did you cut down the amount you smoked before trying to stop completely at your second most recent serious quit attempt?

- 1 ☐ 1. Cut down first
- 2 ☐ 2. Stopped without cutting down
- 9 ☐
- 3 ☐ DK\CR

Question 6334

Question only asked, if [Q207 > 0 and Q207 < 151]
1956L1

SHOW SCREEN

q632c8

Which one of the following applies to your second most recent serious quit attempt?

- 1 ☐ 1. I planned the quit for later the same day or for a date in the future
- 2 ☐ 2. I started the quit attempt the moment I made the decision I was going to stop
- 9 ☐
- 3 ☐ DK

Question 6335

Multiple answers allowed
Open ended answer is written as a bitmap
Question only asked, if [Q207 > 0 and Q207 < 151]
1957L100

SHOW SCREEN - MULTI CHOICE

Q632c9a

Which of the following do you think contributed to you making the second most recent quit attempt?

INTERVIEWER: PLEASE CODE ALL THAT APPLY

PROBE FULLY: Which others?

PLEASE WRITE IN OTHER ANSWERS CAREFULLY AND USE CAPITAL LETTERS

PLEASE SCROLL DOWN TO SEE FULL LIST OF RESPONSES

- 1 ☐ 1. Advice from a GP\health professional
- 2 ☐ 2. TV advert for a nicotine replacement product
- 3 ☐ 3. Government TV\radio\press advert
- 4 ☐ 4. Hearing about a new stop smoking treatment
- 5 ☐ 5. A decision that smoking was too expensive
- 6 ☐ 6. Being faced with smoking restrictions
- 7 ☐ 7. I knew someone else who was stopping
- 8 ☐ 8. Seeing a health warning on a cigarette packet
- 9 ☐ 9. Being contacted by my local NHS Stop Smoking Services
- 10 ☐ 10. Health problems I had at the time
- 11 ☐ 11. A concern about future health problems
- 12 ☐ 12. Attending a local stop smoking activity or event
- 13 ☐ 13. Something said by family\friends\children
- 14 ☐ 14. A significant birthday
- 15 ☐ 15. Other
- 99 ☐
- 98 ☐ DK\CR

If [Q207 > 2] otherwise continue at question 76501

Question 5555

Question only asked, if [not Q207 , 9998]

The next few questions relate to the third most recent serious quit attempt to stop smoking you made in the last 12 months....

Question 6336

Question only asked, if [Q207 > 1 and Q207 < 151]
2057L1

SHOW SCREEN

q632c0

How long ago did your third most recent serious quit attempt start?

- 1 ☐ 1. In the last week
- 2 ☐ 2. More than a week and up to a month
- 3 ☐ 3. More than 1 month and up to 2 months
- 4 ☐ 4. More than 2 months and up to 3 months
- 5 ☐ 5. More than 3 months and up to 6 months
- 6 ☐ 6. More than 6 months and up to a year
- 9 ☐
- 7 ☐ DK\CR

Question 6337

Question only asked, if [Q207 > 1 and Q207 < 151]
2058L1

SHOW SCREEN

q632d1

How long did your third most recent serious quit attempt last before you went back to smoking?

- 1 ☐ 1. Less than a day
- 2 ☐ 2. Less than a week
- 3 ☐ 3. More than 1 week and up to a month
- 4 ☐ 4. More than 1 month and up to 2 months
- 5 ☐ 5. More than 2 months and up to 3 months
- 6 ☐ 6. More than 3 months and up to 6 months
- 7 ☐ 7. More than 6 months and up to a year
- 9 ☐
- 8 ☐ DK\CR

Question 6338

Multiple answers allowed

Open ended answer is written as a bitmap

Question only asked, if [Q207 > 1 and Q207 < 151]
2059L100

SHOW SCREEN - MULTI CHOICE

Q632e42

Which, if any, of the following did you try to help you stop smoking during the third most recent serious quit attempt?

INTERVIEWER: PLEASE CODE ALL THAT APPLY

PROBE FULLY: Which others?

PLEASE WRITE IN OTHER ANSWERS CAREFULLY AND USE CAPITAL LETTERS

PLEASE SCROLL DOWN TO SEE FULL LIST OF RESPONSES

- 1 ☐ 1. Nicotine replacement product (eg. patches\gum\inhaler) without a prescription
- 2 ☐ 2. Nicotine replacement product on prescription or given to you by a health professional
- 3 ☐ 3. Zyban (bupropion)
- 4 ☐ 4. Champix (varenicline)
- 5 ☐ 5. Attended a Stop Smoking group
- 6 ☐ 6. Attended one or more Stop Smoking one-to-one counselling\advice\support session\s
- 7 ☐ 7. Phoned a Smoking Helpline
- 8 ☐ 8. A book or booklet
- 9 ☐ 9. Visited www.nhs.uk\smokefree website
- 10 ☐ 10. Visited a website other than Smokefree
- 11 ☐ 11. Hypnotherapy
- 12 ☐ 12. Acupuncture
- 13 ☐ 13. Other
- 99 ☐
- 98 ☐ DK
- 97 ☐ N

Question 6339

Question only asked, if [Q207 > 1 and Q207 < 151]
2159L1

SHOW SCREEN

q632d3

Did you cut down the amount you smoked before trying to stop completely at your third most recent serious quit attempt?

- 1 ☐ 1. Cut down first
- 2 ☐ 2. Stopped without cutting down
- 9 ☐
- 3 ☐ DK\CR

Question 6340

Question only asked, if [Q207 > 1 and Q207 < 151]
2160L1

SHOW SCREEN

q632d4

Which one of the following applies to your third most recent serious quit attempt?

- 1 ☐ 1. I planned the quit for later the same day or for a date in the future
- 2 ☐ 2. I started the quit attempt the moment I made the decision I was going to stop
- 9 ☐
- 3 ☐ DK

Question 6341

Multiple answers allowed

Open ended answer is written as a bitmap

Question only asked, if [Q207 > 1 and Q207 < 151]
2161L100

SHOW SCREEN - MULTI CHOICE

Q632d5a

Which of the following do you think contributed to you making the third most recent quit attempt?

INTERVIEWER: PLEASE CODE ALL THAT APPLY

PROBE FULLY: Which others?

PLEASE WRITE IN OTHER ANSWERS CAREFULLY AND USE CAPITAL LETTERS

PLEASE SCROLL DOWN TO SEE FULL LIST OF RESPONSES

- 1 ☐ 1. Advice from a GP\health professional
- 2 ☐ 2. TV advert for a nicotine replacement product
- 3 ☐ 3. Government TV\radio\press advert
- 4 ☐ 4. Hearing about a new stop smoking treatment
- 5 ☐ 5. A decision that smoking was too expensive
- 6 ☐ 6. Being faced with smoking restrictions
- 7 ☐ 7. I knew someone else who was stopping
- 8 ☐ 8. Seeing a health warning on a cigarette packet
- 9 ☐ 9. Being contacted by my local NHS Stop Smoking Services
- 10 ☐ 10. Health problems I had at the time
- 11 ☐ 11. A concern about future health problems
- 12 ☐ 12. Attending a local stop smoking activity or event
- 13 ☐ 13. Something said by family \friends\children
- 14 ☐ 14. A significant birthday
- 15 ☐ 15. Other
- 99 ☐
- 98 ☐ DK\CR

Question 6501

Multiple answers allowed

Open ended answer is written as a bitmap

Question only asked, if [Q101 , 1 TO 4]

4120L100

SHOW SCREEN

ASH1

In the last 6 months, have you bought any cigarettes or hand rolled tobacco from any of the following?

INTERVIEWER: PLEASE CODE ALL THAT APPLY

PROBE FULLY: Which others?

PLEASE WRITE IN OTHER ANSWERS CAREFULLY AND USE CAPITAL LETTERS

PLEASE SCROLL DOWN TO SEE FULL LIST OF RESPONSES

- 1 ☐ 1. Newsagent\Off licence\Corner shop
- 2 ☐ 2. Petrol garage shop
- 3 ☐ 3. Supermarket
- 4 ☐ 4. Cash and Carry
- 5 ☐ 5. Internet
- 6 ☐ 6. Pub (behind the bar)
- 7 ☐ 7. Pub (vending machine)
- 8 ☐ 8. Pub (somebody who comes round selling cigarettes cheap)
- 9 ☐ 9. People who sell cheap cigarettes on the street
- 10 ☐ 10. People in the local area who are a ready supply of cheap cigarettes
- 11 ☐ 11. Buy them cheap from friends
- 12 ☐ 12. Buy them from abroad and bring them back with me
- 13 ☐ 13. Other
- 99 ☐
- 97 ☐ Have not bought any in the last 6 months
- 98 ☐ DK

Question 6502

Question only asked, if [Q6501 , 1 TO 13 , 98]

4220L3

SHOW SCREEN**ASH2**

People sometimes know where to buy cigarettes or hand rolled tobacco MUCH cheaper than you would see in the shops.

Thinking of all the cigarettes or hand rolled tobacco you have bought in the last 6 months, apart from what you bought abroad yourself, roughly how much of it would you say you got cheap? That is, how much of it did you pay less than standard shop prices for?

- 1 ☐ 1.Up to a quarter
- 2 ☐ 2.More than a quarter, up to a half
- 3 ☐ 3.More than a half, up to three quarters
- 4 ☐ 4.More than three quarters
- 9 ☐
- 8 ☐ DK
- 7 ☐ N

Question 6503

Question only asked, if [Q6502 , 1 TO 4 , 8]

4223L3

SHOW SCREEN**ASH3**

The last time you bought cheap cigarettes or hand rolled tobacco in this country how much did you pay? Please choose how you would like to respond

- 1 ☐ 1.Per packet of 20
- 2 ☐ 2.Per packet of 10
- 3 ☐ 3.Per 50g pouch of tobacco
- 9 ☐
- 8 ☐ DK
- 7 ☐ N

If [Q6503 , 1] otherwise continue at question 76506

Question 6504

Maximum 9

Minimum 0

4226L2

SHOW SCREEN**ASH4**

On average, when you buy these cheap cigarettes in this country, how much did you pay for a packet of 20 cigarettes?

PLEASE CODE AMOUNT IN POUNDS ON THIS SCREEN AND PENCE ON THE NEXT SCREEN - USE WHOLE NUMBERS ONLY NOT DECIMAL POINTS

If [ANS1 < 10 and ANS1 > 0 or ANS1 = "0" or ANS1 = "00" or ANS1 = "DK" or ANS1 = "dk" or ANS1 = " "] continue at question 86504

Question 8504

PLEASE NOTE YOU NEED TO ENTER A NUMBER BETWEEN 0 AND 9 OR 'DK'.

HOWEVER YOU ENTERED:

<Question 6504>

PLEASE TAB 'OK' TO AMEND

Continue at question 76506

Question 6505

Maximum 99

Minimum 0

4228L3

SHOW SCREEN

ASH5

TYPE IN AMOUNT IN PENCE ON THIS SCREEN

USE WHOLE NUMBERS ONLY NOT DECIMAL POINTS

[ANS1 < 100 and ANS1 > 0 or ANS1 = "0" or ANS1 = "00" or ANS1 = "000" or ANS1 = "DK" or ANS1 = "dk" or

"dk" or

If ANS1 = " "] continue at question 86505

Question 8505

PLEASE NOTE YOU NEED TO ENTER A NUMBER

BETWEEN 0 AND 99 OR 'DK'.

HOWEVER YOU ENTERED:

<Question 6505>

PLEASE TAB 'OK' TO AMEND

If [Q6503 , 2] otherwise continue at question 76508

Question 6506

Maximum 9

Minimum 0

4231L2

SHOW SCREEN

ASH6

On average, when you buy these cheap cigarettes in this

country, how much did you pay for a packet of 10 cigarettes?

PLEASE CODE AMOUNT IN POUNDS ON THIS SCREEN AND PENCE ON

THE NEXT SCREEN - USE WHOLE NUMBERS ONLY NOT DECIMAL POINTS

If [ANS1 < 10 and ANS1 > 0 or ANS1 = "0" or ANS1 = "00" or ANS1 = "DK" or ANS1 = "dk" or ANS1 = "

"] continue at question 86506

Question 8506

PLEASE NOTE YOU NEED TO ENTER A NUMBER

BETWEEN 0 AND 9 OR 'DK'.

HOWEVER YOU ENTERED:

<Question 6506>

PLEASE TAB 'OK' TO AMEND

Continue at question 76508

Question 6507

Maximum 99

Minimum 0

4233L3

SHOW SCREEN

ASH7

TYPE IN AMOUNT IN PENCE ON THIS SCREEN

USE WHOLE NUMBERS ONLY NOT DECIMAL POINTS

[ANS1 < 100 and ANS1 > 0 or ANS1 = "0" or ANS1 = "00" or ANS1 = "000" or ANS1 = "DK" or ANS1 = "dk" or

If ANS1 = " "] continue at question 86507

Question 8507

PLEASE NOTE YOU NEED TO ENTER A NUMBER
BETWEEN 0 AND 99 OR 'DK'.

HOWEVER YOU ENTERED:

<Question 6507>

PLEASE TAB 'OK' TO AMEND

If [Q6503 , 3] otherwise continue at question 76510

Question 6508

Maximum 9

Minimum 0

4236L2

SHOW SCREEN

ASH8

On average, when you buy this cheap tobacco in this
country, how much did you pay for a 50g pouch of tobacco?

PLEASE CODE AMOUNT IN POUNDS ON THIS SCREEN AND PENCE ON
THE NEXT SCREEN - USE WHOLE NUMBERS ONLY NOT DECIMAL POINTS

If [ANS1 < 10 and ANS1 > 0 or ANS1 = "0" or ANS1 = "00" or ANS1 = "DK" or ANS1 = "dk" or ANS1 = " "] continue at question 86508

Question 8508

PLEASE NOTE YOU NEED TO ENTER A NUMBER
BETWEEN 0 AND 9 OR 'DK'.

HOWEVER YOU ENTERED:

<Question 6508>

PLEASE TAB 'OK' TO AMEND

Continue at question 76510

Question 6509

Maximum 99

Minimum 0

4238L3

SHOW SCREEN

ASH9

TYPE IN AMOUNT IN PENCE ON THIS SCREEN
USE WHOLE NUMBERS ONLY NOT DECIMAL POINTS

[ANS1 < 100 and ANS1 > 0 or ANS1 = "0" or ANS1 = "00" or ANS1 = "000" or ANS1 = "DK" or ANS1 = "dk" or

If ANS1 = " "] continue at question 86509

Question 8509

PLEASE NOTE YOU NEED TO ENTER A NUMBER
BETWEEN 0 AND 99 OR 'DK'.

HOWEVER YOU ENTERED:

<Question 6509>

PLEASE TAB 'OK' TO AMEND

If [Q6502 , 1 TO 4 , 8] otherwise continue at question 4002

Question 6510

Multiple answers allowed

Open ended answer is written as a bitmap

4241L100

SHOW SCREEN

AH10

Why do you think these cigarettes or hand rolled tobacco are so much cheaper than in the shops?

INTERVIEWER: PLEASE CODE ALL THAT APPLY

PROBE FULLY: Which others?

PLEASE WRITE IN OTHER ANSWERS CAREFULLY AND USE CAPITAL LETTERS

- 1 ☐ 1.Because they are smuggled
- 2 ☐ 2.Because they are bought in bulk
- 3 ☐ 3.Because people buy duty free cigarettes and sell on the ones they don't need
- 4 ☐ 4.Because they are counterfeit
- 5 ☐ 5.Other
- 9 ☐
- 8 ☐ DK

Appendix 7.1: Ethics Approval Letter for study on the views and beliefs of smokers' of illicit tobacco users

**UCL RESEARCH ETHICS COMMITTEE
GRADUATE SCHOOL OFFICE**

Dr Andy McEwen
Department of Public Health and Epidemiology
Health Behaviour Research Centre
1-16 Torrington Place
UCL

14 June 2011

Dear Dr McEwen

Notification of Ethical Approval

Ethics Application: 2988/001: Self-reported behaviour and attitudes of smokers purchasing illicit tobacco

I am pleased to confirm that in my capacity as Chair of the UCL Research Ethics Committee I have approved your project for the duration of the study (i.e. until June 2012).

However, approval is subject to the following conditions:

1. You must seek Chair's approval for proposed amendments to the research for which this approval has been given. Ethical approval is specific to this project and must not be treated as applicable to research of a similar nature. Each research project is reviewed separately and if there are significant changes to the research protocol you should seek confirmation of continued ethical approval by completing the 'Amendment Approval Request Form'.

The form identified above can be accessed by logging on to the ethics website homepage: <http://www.grad.ucl.ac.uk/ethics/> and clicking on the button marked 'Key Responsibilities of the Researcher Following Approval'.

2. It is your responsibility to report to the Committee any unanticipated problems or adverse events involving risks to participants or others. Both non-serious and serious adverse events must be reported.

Reporting Non-Serious Adverse Events

For non-serious adverse events you will need to inform Helen Dougal, Ethics Committee Administrator (ethics@ucl.ac.uk), within ten days of an adverse incident occurring and provide a full written report that should include any amendments to the participant information sheet and study protocol. The Chair or Vice-Chair of the

Ethics Committee will confirm that the incident is non-serious and report to the Committee at the next meeting. The final view of the Committee will be communicated to you.

Reporting Serious Adverse Events

The Ethics Committee should be notified of all serious adverse events via the Ethics Committee Administrator immediately the incident occurs. Where the adverse incident is unexpected and serious, the Chair or Vice-Chair will decide whether the study should be terminated pending the opinion of an independent expert. The adverse event will be considered at the next Committee meeting and a decision will be made on the need to change the information leaflet and/or study protocol.

On completion of the research you must submit a brief report (a maximum of two sides of A4) of your findings/concluding comments to the Committee, which includes in particular issues relating to the ethical implications of the research.

Yours sincerely

Sir John Birch
Chair of the UCL Research Ethics Committee

Cc: Belinda Iringe-Koko, Department of Public Health and Epidemiology, UCL

Appendix 7.2: Advertisement placed in local newspapers for the recruitment of participants for the study on the views and beliefs of smokers' of illicit tobacco users



Advertisement

ARE YOU A SMOKER WHO BUYS CHEAP TOBACCO?

We are investigating smokers' attitudes and views on cheap tobacco and are looking to recruit current smokers aged 18 and over who regularly purchase cheap tobacco to participate in one-on-one interviews. Cheap tobacco refers to tobacco that is cheaper than those sold in shops or supermarkets. All participants will be reimbursed for their time.

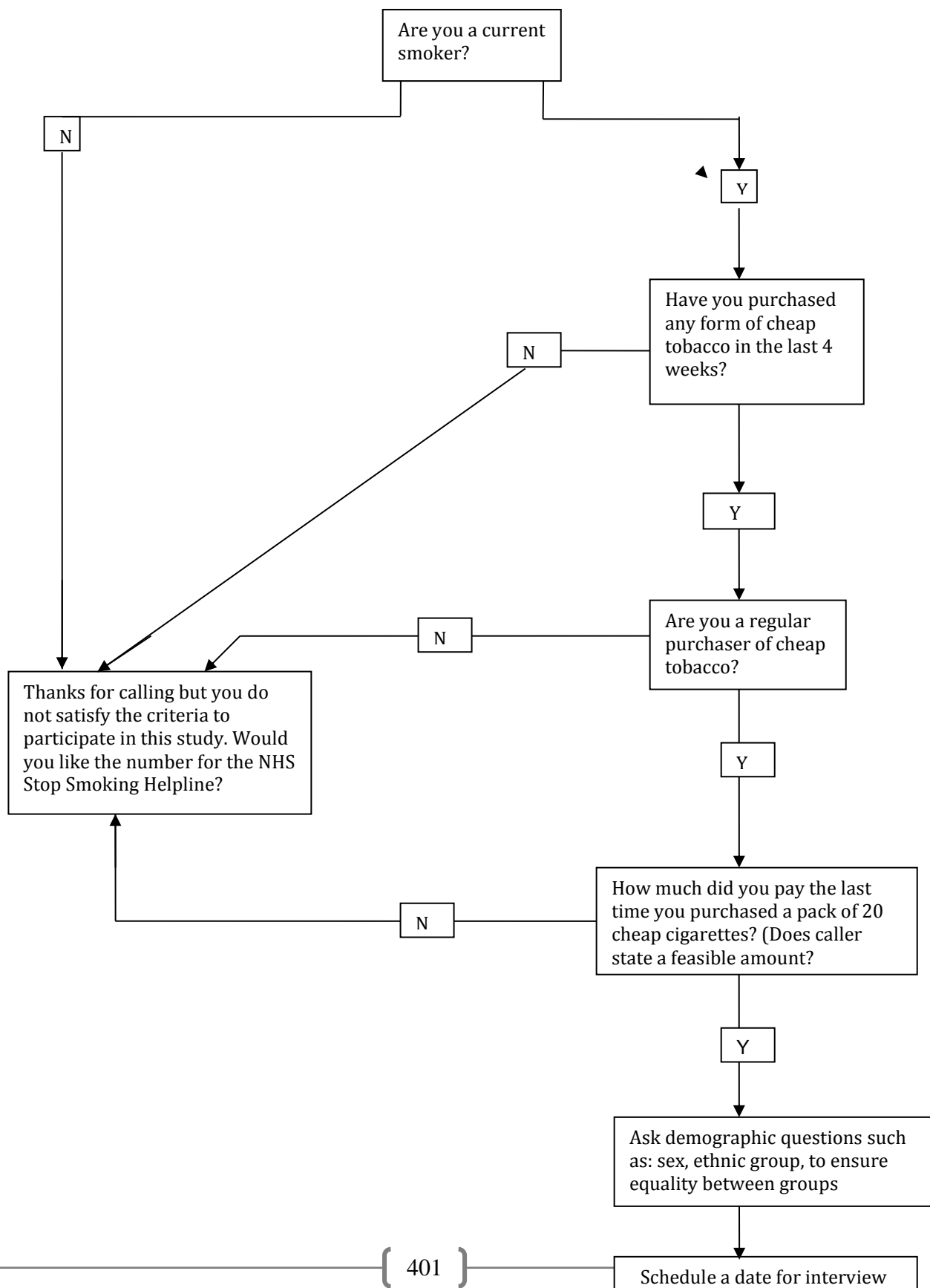
This study is funded by Cancer Research UK.

For more information and to take part in this study please contact Belinda Iringe Koko on 0207 679 1993.

Appendix 7.3: Telephone Conversation Flow Chart

Hello, my name is Belinda. (Briefly cover the study details)

Before we continue, I would like to get some information from you by asking the following questions:



Appendix 7.4: Voicemail recording for calls received out of working hours

“Hi, you have reached the voicemail of Belinda Iringe-koko at University College London. If you are calling with regards to the study on the use of cheap tobacco in England please leave your name and number and I will aim to contact you by the next day.

Thanks for calling!”

Appendix 7.5: Documentation of calls and voicemails received from callers

Date	Name	Phone No.	Call made	Eligible (Y/N)	Date of Appt.	Interested in future research (Y/N)	Comments



Consent Form

Study: In-depth qualitative study into the use of illicit tobacco in England

This study has been approved by the UCL Research Ethics Committee
[Project ID Number]: **2988/001**

Thank you for your interest in taking part in this research. Before you agree to take part the person organising the research must explain the project to you. If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

Participant's statement

I (please print full name) confirm that:

- **I have read the information sheet and/or the project has been explained to me verbally**
- **I have had the opportunity to ask questions and discuss the study**
- **I have received satisfactory answers to all my questions**
- **I understand that the information I have submitted will be published as a report and I will be sent a copy if I request one. Confidentiality and anonymity will be maintained and it will not be possible to identify me from any publications.** ☐
- **I understand that I am free to withdraw from the study at any time**

without penalty if I so wish

- **I consent to the processing of my personal information for the purposes of this study only and that it will not be used for any other purpose. I understand that such information will be treated as strictly confidential and handled in accordance with the provisions of the Data Protection Act 1998.**
- **I hereby fully consent to participate in the study**

NAME (please print)

.....

SIGNED

DATE.....

Researcher's statement

**I
confirm that I have carefully explained the purpose of the study to the
participant and outlined any reasonably foreseeable risks or benefits
(where applicable).**

SIGNED

DATE

Name, address and contact details of researchers

Dr Andy McEwen
Cancer Research UK
Health Behaviour Research
UCL, 1-16 Torrington Place
London, WC1E 6BT
Email: andy.mcewen@ucl.ac.uk

Belinda Iringe-Koko
Cancer Research UK
Centre Health Behaviour Research Centre
UCL, 1-19 Torrington Place
London, WC1E 6BT
Email: belinda.iringe-koko.09@ucl.ac.uk

Tel: 0207 679 1993



In-depth qualitative study into the use of illicit tobacco in England

Information Sheet

This study has been approved by the UCL Research Ethics Committee
[Project ID Number]: **2988/001**

We would like to invite you to participate in this research project. Before you decide whether you want to take part, it is important that you read the following information carefully and discuss it with others if you wish. **Please ask us if there is anything that is not clear or if you would like more information.**

Who we are looking for

We are looking for current smokers aged 18 and over who have purchased cheap tobacco in the last month and regularly do so. If this applies to you, we would be very grateful if you would participate.

Details of the study

This study aims to explore smokers' motivations and views on cheap tobacco. We will be discussing your understanding, knowledge and attitude towards cheap tobacco through an in-depth one-on-one interview.

What will happen if you decide to take part?

If you decide to participate, we will ask you to complete a questionnaire to determine your demographic characteristics and smoking behaviour.

Next, you will be asked a series of questions to facilitate a discussion regarding your purchase and use of cheap tobacco. This discussion will be recorded using a digital audio device.

This whole process should take no longer than an hour and we will reimburse you for your time to the value of £30.

Please note:

- It is up to you to decide whether or not to take part.
- If you choose not to participate it will involve no penalty or loss of benefits to which you are otherwise entitled.
- If you decide to take part you will be given this information sheet to keep and be asked to sign a consent form.
- If you decide to take part you are still free to withdraw at any time and without giving a reason.

Benefits to participating

Although there will be no immediate benefit to participating, we will reimburse you for your time to the value of £30.

In addition, we hope that by taking part your knowledge of the issues surrounding cheap tobacco use and its disadvantages will increase, as will your knowledge about what you should do if you are aware of persons selling cheap tobacco in your area.

Finally, we will encourage you to quit smoking and will offer the NHS stop smoking helpline.

Confidentiality

All of the data we collect will be confidential – there will be a unique participant number on each questionnaire and interview recording and we will not be able to link this back to your name. All the study materials will be collected and stored in accordance with the Data Protection Act 1998.

Thank you for taking the time to consider participating in this study. Please do not hesitate to direct any questions you have, either to the researcher conducting the study or to any of the researchers below

Name, address and contact details of researchers

Dr Andy McEwen
Cancer Research UK
Health Behaviour Research
UCL, 1-16 Torrington Place
London, WC1E 6BT

Belinda Iringe-Koko
Cancer Research UK
Centre Health Behaviour Research Centre
UCL, 1-19 Torrington Place
London, WC1E 6BT

Email: andy.mcewen@ucl.ac.uk Email: belinda.iringe-koko.09@ucl.ac.uk
Tel: 020 7679 1993

Appendix 7.8: Demographic and smoking characteristics questionnaire

Please fill out the following questionnaire. This should take you no longer than 5 minutes.

Date of birth: ____/____/____

Are you:

- ☐ Male
- ☐ Female

Which of these groups' best describes you? (*Tick one answer*)

- ☐ White British
- ☐ White Other (please specify country) _____
- ☐ Black-British
- ☐ Black African
- ☐ Asian
- ☐ Other (please specify race/ethnicity) _____
- ☐ Prefer not to say

Are you: (*Tick one answer*)

- ☐ Single
- ☐ Separated/divorced
- ☐ Married/living with partner
- ☐ Prefer not to say

What is your highest qualification? (*Tick one answer*)

- ☐ GCSE
- ☐ AS/A level
- ☐ University Degree
- ☐ Post graduate/equivalent
- ☐ Prefer not to say

Which occupational group do you fit into? (*Tick one answer*)

- ☐ Professional/managerial
- ☐ Intermediate/administrative
- ☐ Skilled manual
- ☐ Unskilled manual
- ☐ Student
- ☐ Unemployed
- ☐ Pensioner

Do you: (*Tick one answer*)

- ☐ Own your own house
- ☐ Rent

Are you in receipt of free NHS prescription? (*Tick one answer*)

- ☐ Yes
- ☐ No

How long have you been a smoker? (*Write to the nearest number of years*)

[] years

[]

[] Daily

☐ Monthly

☐ Cigarettes

$$[\quad]$$

Appendix 7.9: Smokers Interview topic guide

1. Preamble

Thank you for participating in this study on the ‘Beliefs and views of smokers who purchase cheap tobacco. Just so you’re aware, I will be recording this interview. Please stop me at any point during the interview if you have any questions. Our conversation is confidential and will be anonymised during analysis. All data will be stored in line with the Data Protection Act. We are asking people who buy cheap tobacco to talk about their smoking and choice of tobacco products so we understand what influences their behaviour and choices.

2. Introduction - Smoking characteristics

Could you tell me a bit about your current smoking behaviour?

PROBES: What age did you start smoking?

Do you smoke cigarettes or hand-rolled tobacco?

How many cigarettes/roll-ups do you usually smoke a day?

What brand of cigarettes/tobacco do you usually smoke?

How long have you chosen this brand?

Do you smoke more than one brand or do you stick to only one brand?

Do you buy budget (cheap) brand cigarettes? If so, how often?

3. Understanding of illicit tobacco and its use

What do you understand by the term ‘cheap tobacco’?

What do you consider as cheap?

PROBES: How much do you pay for your cheap tobacco?

Do you stick to one brand of cheap cigarettes/tobacco or do you go for whatever is cheapest or available?

PROBES: What brand of cheap cigarettes/tobacco do you purchase?

Do you buy this brand when you cannot afford your preferred brand or is this cheap brand the only one you buy?

4. Purchase of illicit tobacco

We know that there are a variety of different ways that people can buy cheap tobacco and are interested in understanding these better:

Could you tell me how you go about obtaining cheap cigarettes/tobacco?

PROBES: What led to your decision to start purchasing cheap cigarettes/tobacco?

How long have you been purchasing cheap cigarettes/tobacco?

Could you tell me more about your sources of cheap cigarettes/tobacco?

PROBES: Do you have more than one source?

Do you approach sellers or do they approach you?

How did you find out about these sources of cheap cigarettes/tobacco?

Do you smoke cheap tobacco exclusively or do you purchase from other sources as well?

When was the last time you purchased cheap cigarettes/tobacco?

PROBES: How often do you purchase cheap cigarettes/tobacco?

How much cheap tobacco do you buy at each purchase?

5. Motivations for purchasing illicit tobacco

Could you tell me your reasons for purchasing cheap cigarettes/tobacco?

What effects do you think illicit tobacco has on your smoking behaviour?

6. Views on the effects of illicit tobacco

What effects do you think the sale of illicit tobacco is having on your community?

Do you worry about the content/health impact of the cheap cigarettes/tobacco you purchase?

What are your views on the statement that ‘the sale of cheap cigarettes/tobacco funds terrorism and encourages criminality in your community’?

7. Final thoughts

What would prevent you from purchasing cheap cigarettes/tobacco?

8. Debrief

Have you thought about quitting smoking?

Would you like the number for the NHS Stop Smoking helpline?

Appendix 7.10: Transcribed Interview Example with Participant M10

Age: 35 years

Gender: Male

Ethnicity: White-British

Marital Status: Married/living with partner

Duration of smoking: 21 years

Number of cigarettes currently smoking a day: 20

Frequency of cheap tobacco purchase: Weekly

Type of tobacco purchased: Cigarettes

Brand of cigarette/tobacco: Benson and Hedges

BIK: I'll start with some general questions, what age did you start smoking?

M10: I was 14

BIK: and when you were that age how did you get your cigarettes?

M10: started off with...used to sort of buy them with me pocket money and then my mum smokes so when I told her she said alright fine you can smoke as well. She wasn't happy but I think she'd rather sort of know what I was doing than be you know sort of trying to get the money (?) other ways. So she'd...I didn't smoke many at that time probably a couple a week if I had a bad day at school. I mean it stayed like that for the next couple of years. You know a packet of 10 would last me a week or more. I started smoking more heavily when I started college at 17 and then I got up to like 15 a day and its now 20 a day

BIK: and how did you get your cigarettes then?

M10: I used to buy them myself out my own income. I did a part time job

BIK: ok so you got them from the shops

M10: yeah yes I used to get them from the shop. I only started getting duty frees over the last sort of 5 years as the price just got more and more expensive, it just seemed crazy. And I didn't like them at first, I mean those ones i smoke they are nothing like proper Benson and Hedges as i call them, they just...I don't know they just...they taste like...they are like silk cut, they don't seem to have any...with an English Benson and Hedges you have one and you feel like you've smoked, with those you could smoke five and feel like you haven't really touched a cigarette.

BIK: so you're saying it's not as strong as...

M10: No it's not as strong as the English ones I don't think... but you know the price is so much cheaper

BIK: before you started buying cheap what brand did you usually smoke?

M10: erm...well I started off from Benson and hedges and as the price of those got expensive I went down to Richmond which were a cheaper brand and...oh no before Richmond it was Lambert and Butler which were the cheapest and then Richmond come on the market and that was cheaper still. But then as the prices gone up and there's very little difference between brands I started buying the cheap cigarettes

BIK: so over the last 5 years you've bought the cheap Benson and Hedges

M10: yeah yeah

BIK: what is it about Benson and Hedges that you like, cos you were smoking those before weren't you?

M10: erm...I don't know i think initially i liked the gold packaging, I also...with the English ones you feel like if you've had a Benson and Hedges you feel like you've smoked and that does you for a while whereas if you smoke anything

milder it's like within half an hour you're looking for a cigarette, you think this is ridiculous you know I've just had one you know. So I suppose its...I mean as I said the gold packaging was quite alluring and yeah I suppose just historic reasons, I remember when i first used to go clubbing you could get these like armbands which were like sort of a PVC thing and it had a cigarette holder in it and I always felt Benson and hedges looked really nice, the gold packaging on the top. Sounds very pathetic but that's what drew me

BIK: so are you saying with the British Benson and hedges do you find that you smoke less because it's stronger?

M10: far less yeah, yeah with the British Benson and hedges probably 11 or 12 a day would be sufficient but with those it's like at least 20, I mean usually I keep it to 20 because I want my packs to last

BIK: where do you usually get your cheap tobacco?

M10: this guy in the pub sells them to me and a client of mine usually gives me a couple of packs when I see him

BIK: are those the only two places you get your cheap?

M10: yeah I used to go to...there was a market that [...] used to sell them but I haven't seen him in a while so whether he got busted or whether they've moved somewhere else I don't know but yeah that's the only place I get it now

BIK: how long have you been buying from the pub?

M10: probably in the last sort of 3 years I suppose. For 2 years it was just from the market and then when that source dried up I had to go back to buying English ones and I was in the pub one day and someone said 'we've got cheaper versions of those for £3 a packet' which is well over half the price so I thought fine I'll do that then

BIK: was it a guy that came up to you and said we have cheap ones or the owner of the pub?

M10: guy come up to me in the pub

BIK: did he work there or...?

M10: I don't think so, no I think he was just sort of known as a character

BIK: so he was known as someone that had cheap?

M10: yeah yeah, I mean I've since found out that...you know if I've been there with my cigarettes someone says "oh did you get those off so and so and I'm like yeah. So he was obviously quite known for doing that

BIK: so to start off with he approached you...

M10: yeah he come to me and says do you want...he noticed I was smoking Benson and Hedges he says "I've got like cheap brands of that if you want it" I says alright then I'll buy one pack and see what they're like. I wasn't particularly impressed but the price of the British ones are so expensive I just didn't really have the option.

BIK: and since then you just go...do you go to the pub to look out for him?

M10: yeah yeah I generally on a Friday I'll go in after work and hopefully he'll be around and if he is I go up to him and say could you sort me out for a 100, [?] me for the next week

BIK: how much do you usually buy at one time?

M10: usually buy 5 packs at a time, that's about 15 quid

BIK: and that would last you for the week?

M10: yeah yeah, I mean sometimes I'd buy packs of 10 on top from the British shops if I need to but it's only if I've had a night out or I've been sharing my fags out with friends

BIK: so you go to the shop to get...

M10: yeah get the top up ones yeah the packs of 10

BIK: do you do that when you've run out of the cheap ones?

M10: erm....well I have a limit...I say like 20 a day or less but if I'm going out for the night I usually buy a pack of 10 so I can share the pack of 10 out with friends

BIK: why don't you share your cheaper ones with friends?

M10: cos they are rubbish, they wouldn't want to smoke them if given a choice. I mean to be honest you got to be...you've really got to need a cigarette to want those. I mean I've got used to them now but I just find them bland and they've got no flavour and yeah. I mean I think the B&H you buy in this country have got honey in them, they are certainly smoother on the throat than those they are quite raspy so em...needs must.

BIK: but you still get them cos obviously they are cheaper

M10: yeah they are cheap and I'm hooked on nicotine so it's my way of getting my nicotine fix.

BIK: so you get your cheap once a week and then top up if you're going out?

M10: yeah if I'm going out somewhere I'll buy an extra pack of 10 to sort of flash around to me mates

BIK: cos you don't want to show off your cheap...

M10: cheap ones yeah well they've had them I mean if we run out then they'll smoke them but they always say they are nothing like the English B&H. They are just...they are really bland, it's a bit like smoking silk cut I suppose

BIK: have you tried any other brands, like cheap brands?

M10: yeah I once tried... he once had Marlboro which were like the cheap cigarettes and I've never liked Marlboro anyway I think they are really sort of rough on the throat and he once had camels and I thought well they'll have to do cos you know when you smoke really you'll smoke anything it's just how many you'll smoke to get the same fix. I couldn't stand those they tasted....they were so dry and raspy, you know I mean it certainly slowed my smoking down because I just hated having them. I'd have to be really sort of climbing the walls...'oh God I'll have one then'.

BIK: so you didn't like the taste of those cheap ones?

M10: No not at all

BIK: but you're sticking to this cheap B&H?

M10: yeah they are tolerable and for the price they are alright

BIK: how much do you pay for a packet of 20?

M10: £3

BIK: and how much would it be if you were going to the shops?

M10: if I was going to the shops that same pack would cost me nearer £7. Depending where you go it'll be between £6.90 and £7.50 so you know there's just no comparison just couldn't afford to...couldn't. Well I suppose you would cut back on other things. I mean I've got friends who are on benefits and they cut out food so they can smoke, which really isn't doing them any favours. I mean of course they should give up but, just sit them down and...

BIK: would you think of giving up you know...

M10: well I have done, I mean I've had several attempts over the years with patches and the inhalators. The best thing I ever found was this mouthwash that you gurgled with and it apparently sort of strips your taste buds of all the chemicals that are in your mouth and when you smoked a cigarette you got the full taste of it and it was horrible you know you just couldn't. And I bought one bottle of it and then i couldn't find the...went back to Liverpool street station where they were doing that and it was gone but it was great stuff every time you wanted a cigarette you rinsed with this mouthwash you lit your cigarette you put it out the thought of it you just couldn't stand the thought of a cigarette for hours and hours

BIK: so it made the cigarette taste so horrible that you didn't want to smoke?

M10: yeah I don't know i mean he said it just sort of striped away the gunk in the mouth but I won't be surprised if it had some reaction with the cigarettes so that when you smoked it you know it tasted foul. A bit like...a bit like with alcoholics when they give them [...] so that when they drink alcohol it makes them sick. I mean to me it worked wonders it just put me right off the cigarettes. And I found the Allen Carr book the only way to give up smoking I read that fantastic I gave up for nearly a year and it was rather stupid of me but I went back on cigarettes and I've tried reading the book since but i just can't get into it. Which is a shame because I found that book fantastic, without any nicotine replacement it just works on how you view smoking and you know its...it looks at everything on a very sort of subconscious level and I found that brilliant. But as I said I haven't been able to read it through since

BIK: so you've tried to quit a couple of times?

M10: yeah and I just found like...the nicotine patches start to peel off me I don't know if it's because my skin are too sweaty but they sort of start to peel. The inhalators I find like I'm tugging on them so much I feel like I'm gonna be start coughing. I can't take the Champix cos I'm on antidepressant medication so that's

out of the question. And those microtab things I'm not keen on either because i kept swallowing them [laughs] so that didn't really work out. And nicotine gum I tried once and it was...uhhh...I ended up...I couldn't...I had to give the away to a friend I couldn't stand them.

BIK: if there was no more cheap tobacco and the prices in the shops went up and up would that make you think of quitting again?

M10: no it'll make me think about cutting back on other things. I mean there's some point in time...I mean I think...my belief is as a smoker you go through cycles where you sort of...there's like a window of opportunity when you start thinking I don't like doing this I'm feeling the effects of it and in a sort of space when you try to give up and you start thinking about it and you might try the nicotine therapy whatever you choose. And you do well for a time but then it just, something goes wrong and back you start. And it's always...it's never the difficult times, people always think it's the stressful time that gets you smoking, 9 times out of 10 it'll be when you're with a crowd of friends having a laugh and almost like you go back to your teenage naughtiness, you know you're doing something a bit mischievous and you just light up a cigarette without thinking about it. I mean I wish they had nicotine rehab like they do for drugs and alcoholics, where you could be taken miles away for three months, given intensive psychotherapy and let out again you know [laughs] but there's nothing like that I suppose the government makes too much out of it

BIK: why do you think the prices are so high here in the UK on tobacco?

M10: tax is the main part. They dress it up as oh we want people to give up but the government ain't stupid they know, they know when you're addicted to something, look at an alcoholic they'll go without food, everything else comes second to their addiction and you know it's the same with nicotine. If you're an addict you'll find the money somehow. If they put it up to £20 a day they'll be more cheap tobacco, more imports but those who had to will still find the money from somewhere. It's a very sad state of affairs I mean I just wish they'll ban cigarettes completely and stop messing around with, we're gonna put them behind this, we're gonna put them in plain packaging. For as long as there's cigarettes

about people will go and buy them, once you're addicted, your addicted but you could sort of stop the next generation from having the exposure

BIK: do you wish you hadn't started smoking in the first place?

M10: that's a tough one, there are times but...generally speaking when I started smoking I kind of enjoyed it. It was nice to sit down for a cup of tea and a cigarette [laughs]. Yeah I mean obviously I think about it and I think all the money saved will be fantastic and from a health perspective it would be so much better but unfortunately its one of those things I suppose once you're addicted you close your mind off to everything else

BIK: I don't know if I asked you already but what led to your decision to start buying cheap?

M10: erm...it was price, it was just getting so expensive. And I thought well I can cut back on food, I can cut back on fuel but certain things are fixed, the rent is a fixed cost, council tax is a fixed cost and transport's a fixed cost. So I could cut back on all the other things that are bare essentials, it was like what else can I cut back on, I've got to either earn more or spend out on less and being an addict I couldn't see myself stopping on the cigarettes so when of course someone said to me do you want these at £3 a packet I was like yeah happy days problem solved.

BIK: what do you think about the people that sell this cheap tobacco?

M10: I think then there's the people on the frontline are reasonable people but I would certainly suspect that higher up the chain there's all sorts of other nasty stuff that you wouldn't approve of. You know I suppose it's a bit like pirate DVDs, drug barons, you know alcohol bootleggers like you had in the prohibition of the 30s, it's like there's always a nasty underbelly to it. But then there's a nasty underbelly to smoking itself and part of it is you close your mind off

BIK: people believe that cheap tobacco is connected to organised crime and funding terrorism, what are your views on that?

M10: erm...I don't...Until I can see that actual factual evidence where they have caught one of these ringleaders. I mean if they know it's connected why don't they go after the people at the top. It's a bit like drug dealers they always go for the people on the street whereas the real target should be those at the very top of the supply chain, get rid of them and the whole system collapses. And I'm yet to see anyone who's right at the top connected with terrorism links or anything like that being done for importing tobacco, I've not seen it, it's just... to me it's becoming like another urban myth.

BIK: are you saying you don't believe it?

M10: I'm not inclined to believe it at the moment no

BIK: also people that sell cheap tobacco, a lot of people believe they could be selling to younger kids as well...

M10: Now that I can believe...yeah that I can believe. Personally I'll be horrified. I haven't seen the guy I buy from do that, if I did I would go seeking out someone else and cut him out as a supplier to me. Yeah I can well believe that because like anything if you're selling something and profit is your main motivation then you'll look for whatever markets you can and it won't surprise me the slightest if they were selling to underage kids

BIK: so you're saying if you found out that your supplier was doing that you would...

M10: I'd look to change supplier. I mean I wouldn't say right that's it I'm not using you anymore but I'd look around for elsewhere and then sever the connection

BIK: you'll look for cheap tobacco elsewhere?

M10: yeah yeah

BIK: and do you feel like you're playing a certain part in this activity that is not legal when you go to buy cigarettes from these places?

M10: I'll be honest I close my mind to it. I don't really feel comfortable about it. Erm...you know I appreciate at the end of the day the tax take is needed to support public services but my feeling is if I don't pay my rent and council tax then public services are hit that way cos I'm in a council home so you know one way or another something's gonna give

BIK: so you don't really think about it?

M10: No not especially. You close your mind to a lot of things, I suppose as a smoker you get used to that, you know you know the danger, you know the risk and you sort of close your mind off to it

BIK: would you support them getting rid of cheap tobacco completely?

M10: I would more support them getting rid of tobacco products completely. If they banned tobacco sales completely then to smoke cheap tobacco which will be all you could get, you would have to find sort of secret hideaways a bit like crack dens. It would then lose its glamour, it would then lose...there'd be so few places you could do it and so few opportunities to buy it you would have to give up. I wish the government would just be honest and just ban it completely

BIK: on the other side of things what effect do you think this cheap tobacco is having on your smoking?

M10: erm...I do smoke less cos I don't like them. I think if I was smoking Benson and Hedges as I enjoy it would have probably crept up over time because most smokers I know the amount they smoke creeps up like any drug. The amount you have to use to get the same effect creeps up but with those I really don't enjoy smoking them I find them a miserable cigarette so I've got...I find I've got to be really desperate for a cigarette before I take one of those

BIK: so you're saying it makes you smoke less?

M10: yeah conversely it does make me smoke less cos I just don't like them but I can't afford to buy the shop brand ones very often

BIK: and what about you know the health effects of buying these cheap cigarettes?

M10: I'm very dubious about the health effects of those. I don't say any cigarette is good for you but I can't help but feel that what is sold in Britain may have high quality controlled standards or might at least be more standardised, with those you really don't know what you're gonna be smoking. They could be putting all sorts of stuff in there but unfortunately it's a price you have to pay

BIK: so you do think about that when you're buying it?

M10: yeah i often think you know what is all that Arabic writing saying you know? [laughs] I mean the fact it's got Arabic writing on it...a friend of mine who does speak a little bit of it he said to me...he's Iranian and he could translate some of the words he said oh look these are health warnings. But he couldn't understand it all he said some words are like pretty universal in the language and others just weren't

BIK: and it doesn't have the visual...

M10: there's no visual picture on it no. I think that's a European directive rather than a worldwide agreement

BIK: going back to the selling of cheap tobacco being an illegal activity what do you think the effect is on the community to have this criminal activity going on?

M10: erm I mean there is the argument that it's a sort of slippery slope, that people start losing respect for the law. We certainly saw that in America in the age of prohibition; people who would normally be totally law abiding couldn't see the sense in the law so went and bought illegal alcohol and I think it does undermine the effectiveness of law. But then again you know the way they tax tobacco sky

high is hypocritical it's nothing to do with wanting people to give up smoking it's just a tax take. And I'd rather they were honest and say look we are gonna put it up because we want the tax. I don't believe the price of cigarettes makes people stop, it might make people stop from starting but once you're an addictive you'll find the money wherever it was. And I think the effect on the community yeah it does...it can...it starts to make you question what other laws are not actually there for any particular purpose

BIK: so what would stop you from buying this cheap tobacco or cigarettes?

M10: erm...if cigarettes as a whole was banned I would stop buying cheap tobacco because then it would be quite apparent that drug dealers the people who pushed other drugs were in on the act as well. And if cigarettes as a whole was banned there wouldn't be anywhere to smoke even in your own home would be risky cos you don't know whether your neighbours would report you so that would stop me in its tracks, probably I'd have to just give up smoking. Cos if you couldn't get it anywhere then you're really stuck and I certainly wouldn't want to be going round to you know dark and dingy car parks getting a supply. So yeah that's the only thing that would stop me

BIK: you just said that knowing that drug pushers were directly connected to cheap tobacco could make you stop but what about knowing right now that it's actually connected to organised crime that could have drugs involved as well?

M10: well again as I say I've never seen the evidence of it. A lot of people I've spoken to...I mean this guy I buy it from he works on the airline so I know he goes off to like United Emirates or whatever it is so I believe he's buying his from the country of origin and bringing them back. Erm, when I was buying of the market stall no I don't know what else they were up to but certainly if I was buying a regular supply and someone said oh do you want something a bit stronger or whatever it would put me off buying from them straight away. Whether people somehow know that about me and therefore don't offer or what...I don't know but yeah certainly if I knew that there were drugs...if I knew there was a direct link to drugs and I saw evidence of it rather than rumour then yeah it would stop me

BIK: for the moment you don't really believe that there is?

M10: no I haven't seen anything conclusive

BIK: Do you have any final comments?

M10: erm...I understand they'd never reduce the tax take on cigarettes but if they'd freeze it or put it up just with inflation as my income crept up I'd be more likely to stop buying the cheap cigarettes. But of course I can't see the government doing that they make the money out of it and that's what annoys me even if they said the tax would go straight to cancer research I'd be more inclined to buy my cigarettes direct or any sort of cancer charity. The fact that it goes into government [...] to keep income tax down I find it...it's just very regressive and not really...I don't like that at all but that's life

BIK: that's it thank you

Appendix 7.11: Study Three Thematic Chart

Smokers' definition and use of illicit tobacco		
Themes	Sub-themes	Quotes
1. Understanding of the term 'cheap tobacco'	1.1 Not purchased from the shops	'That you're not buying from a shop, that you're buying off a market or you're buying it from like tax free that's my understanding' (F2 – 38 year old female, monthly buyer)
	1.2 Cheaper than in the shops	'Erm...well just thought it meant erm like cheap... like people selling them illegally, selling them cheap, yeah' (M3 – 27 year old male, weekly/twice a week buyer)
	1.3 Buying tax/duty free	'Well I mean usually some sort of duty free, something from another country, that's the way I perceive it' (F6 – 31 year old female, fortnightly/monthly buyer) '[...] or duty free' (M13 – 35 year old male, weekly buyer)
	1.4 Fake, counterfeit, lower end tobacco	'Well cheap like probably the lower end of tobacco or like well like the way that I buy it, I'll just buy it off of friends' (F4 – 22 year old female, weekly buyer) 'Cheap tobacco would be either the fake stuff which there seems to be a lot of about' (M13 – 35 year old male, weekly buyer)
	1.5 Bootlegged	'You only have to wait for a ferry so long from Dover or wherever it is. There is more than one point to get to France or to Calais and you can buy stuff there. What they call the 'booze cruises' right cos that's what it's called, it's not really called smuggling. There's people going there everyday...they might have a transit van, they are bringing stuff back' (M16 – 66 year old male, monthly buyer)
	1.6 Smuggled	'Well I just put it down as your looking for a polite phrase of bootleg, dodgy, import, UK not tax paid so...either imported as in smuggled or bootleg as in brand copied, lower quality tobacco with...made to look like it's the real thing basically. Yeah that's what I thought so...you know stuff where the government is losing on taxes basically' (M6 – 47 year old male, weekly buyer)
2. Brands of illicit tobacco purchased	2.1 Marlboro {lights or reds}	'Marlboro lights, Marlboro lights is the one that I get' (F2 – 38 year old female, monthly buyer) 'I'll have Marlboro, a 20 pack of Marlboro for the cheap cigarettes' (M3 – 27 year old male, weekly/twice a week buyer)
	2.2 Cutters choice (HRT)	'Cutters Choice, it's quite cheap' (F4 – 22 year old female, weekly buyer)
	2.3 Benson & Hedges	'Benson and Hedges... it's just the brand I've always bought' (F6 – 31 year old female, fortnightly/monthly buyer) 'Benson and Hedges' (M9 – 42 year old male, monthly buyer)

	2.4 Drum {Gold} (HRT)	‘With tobacco its drum gold but usually when you get the cheap stuff from the continent you can’t get Drum gold you just get Drum’ (F1 – 50 year old female, monthly buyer)
	2.5 Old Holborn (HRT)	‘Old Holborn’ (M9 – 42 year old male, monthly buyer) ‘Roll ups would be Old Holborn’ (M13 – 35 year old male, weekly buyer)
	2.6 Golden Virginia (HRT)	‘That’s Golden Virginia’ (M6 – 47 year old male, weekly buyer) ‘Golden Virginia’ (M3 – 27 year old male, weekly/twice a week buyer) ‘Golden Virginia’ (M7 – 57 year old male, weekly/twice a week buyer) ‘No just Golden Virginia’ (M14 – 53 year old male, monthly buyer) ‘Always Golden Virginia yes’ (M8 – 46 year old male, weekly buyer)
	2.7 Kent	‘Or the Kent’ (M3 – 27 year old male, weekly/twice a week buyer)
	2.8 Gold leaf	‘It’s the Gold leaf that I used to smoke’ (M5 – 33 year old male, daily buyer)
3. Reasons for preferred brand	3.1 Easy to get cheap/easy access	‘Generally I just buy Marlboro reds because they...if people have got branded cigarettes Marlboro reds are the ones they normally have, Marlboro reds or Marlboro lights’ (F1 – 50 year old female, monthly buyer)
	3.2 Taste	‘Marlboro lights or like the vogues cos they are actually a bit lighter so there’s not so much tar’ (F2 – 38 year old female, monthly buyer) ‘The golden Virginia is a bit more expensive and it tastes...I think...I personally think it tastes quite stronger whereas the amber leaf, the cutter choice it’s cheaper but it’s a bit lighter so’ (F4 – 22 year old female, weekly buyer) ‘I guess it’s the flavour’ (F1 – 50 year old female, monthly buyer) ‘I also...with the English ones you feel like if you’ve had a Benson and Hedges you feel like you’ve smoked and that does you for a while whereas if you smoke anything milder it’s like within half an hour you’re looking for a cigarette’ (M10 – 35 year old male, weekly buyer)
	3.3 Price	‘The golden Virginia is a bit more expensive and it tastes...I think...I personally think it tastes quite stronger whereas the amber leaf, the cutter choice it’s cheaper but it’s a bit lighter so’ (F4 – 22 year old female, weekly buyer)
4. Span of illicit tobacco purchase	4.1 3-4 months	‘About 3-4 months now’ (F4 – 22 year old female, weekly buyer)
	4.2 3-5 years	‘I’ll say probably the last 5 years’ (F2 – 38 year old female, monthly buyer) ‘I only started getting duty frees over the last sort of 5 years’ (M10 – 35 year old male, weekly buyer) ‘4 years or 5 years’ (M13 – 35 year old male, weekly buyer)

		'2 to 3 years actually' (M1 – 46 year old male, weekly buyer)
	4.3 10-11 years	'I'd say buying the cheap cigarettes I think probably the last 10 years or so' (F2 – 38 year old female, monthly buyer) 'Like almost since I started smoking you know [10 years]' (M3 – 27 year old male, weekly/twice a week buyer)
	4.4 15-20 years	'So sort of on and off since then really...16 years till 31 years' (F6 – 31 year old female, fortnightly/monthly buyer) 'I would say pretty much on and off for the past 15 years' (F1 – 50 year old female, monthly buyer)
5. Quantity of illicit tobacco purchased	5.1 200 cigarettes (a carton)	'Stacks like the stack like 10 in a stack, yeah... 200 yeah' (F2 – 38 year old female, monthly buyer) 'Like when I buy like the cigarettes before you just buy like a carton of them and you get like 200 in there' (F4 – 22 year old female, weekly buyer)
	5.2 Pack of 4 to 6 50g pouches	'6 or 4 I can't remember' (F4 – 22 year old female, weekly buyer)
	5.3 2-3 cigarette packs	'Yeah 2 or 3 packets' (M5 – 33 year old male, daily buyer)
	5.4 5 cigarette packs	'Usually buy 5 packs at a time' (M10 – 35 year old male, weekly buyer)
	5.5 1-4 50g pouches	'I'll buy definitely at least 2 packets because they come in 50g packs so...' (F1 – 50 year old female, monthly buyer) 'For me personally I won't go out and buy tobacco unless I'm buying 3 packets for myself' (M6 – 47 year old male, weekly buyer) 'I just get a 2 ounce pouch once every 10 days' (M13 – 35 year old male, weekly buyer)
	5.6 10 50g pouches	'I'll buy 10 pouches at a time' (M14 – 53 year old male, monthly buyer)
	5.7 Depends on finances at the time	'But if I've stock piled enough money to buy like you know like 20 quid worth then I'll do that but I don't have much money usually so it just depends' (F6 – 31 year old female, fortnightly/monthly buyer) 'I'll buy about...depends on how much money I have at the time' (F1 – 50 year old female, monthly buyer) 'It depends. I don't really have money full stop so I might just buy like 2' (M2 – 21 year old male, weekly buyer) 'It depends how much money I've got on me you know what I mean' (M15 – 36 year old male, weekly buyer)
	5.8 Bulk purchase done for	'Normally like quite a large amount. Like when I buy like the cigarettes before you

	convenience and to have a ready supply of cheap tobacco	just buy like a carton of them and you get like 200 in there, because it's cheap and you're not sure if they're gonna be around all the time its best to buy a load of it' (F4 – 22 year old female, weekly buyer)
6. Exclusivity of illicit tobacco purchase	6.1 Switch from cigarettes to RYO to cut down tobacco consumption	<p>'Well now I mainly just smoke hand rolled tobacco because I wanted to cut down with the smoking so...because it takes longer to roll the tobacco and like. I don't think I really like it as much as the cigarettes, I prefer the cigarettes but because I only buy the tobacco now it's better for me I think. I smoke less, so I smoke tobacco basically' (F4 – 22 year old female, weekly buyer)</p> <p>'But these one's I've gotta roll it up, half the time I can't be arsed if I'm driving it's a pain in the arse. So no that's why...therefore its actually its cut me back smoking we'll look at it that way' (M13 – 35 year old male, weekly buyer)</p>
	6.2 Purchase legitimate tobacco when unable to access illicit tobacco	'Yeah sometimes I have to because I don' have the choice because I'm not always able to get cheap tobacco' (F1 – 50 year old female, monthly buyer)
	6.3 Purchase legitimate tobacco when out socially	<p>'If I'm actually going out on a date I'll probably buy a packet of cigarettes and if the woman say for instance smokes then obviously I've got...I guess it's that brand...it's like people like their Gucci bags and all that its like that...what you don't want to turn up and have a replica pack of cigarettes and they think you're cheap' (M11 – 43 year old male, weekly buyer)</p> <p>'Yeah sometimes if it's like the weekend and I'm going out and then I'm drinking like I can't be bothered to roll tobacco so I'll buy like cigarettes' (F4 – 22 year old female, weekly buyer)</p> <p>'But if I'm going out for the night I usually buy a pack of 10 so I can share the pack of 10 out with friends' (M10 – 35 year old male, weekly buyer)</p> <p>'I sometimes go to the shop and get cigarettes but only if I'm going out for Friday or Saturday night' (M13 – 35 year old male, weekly buyer)</p>
	6.4 Would purchase budget brand legitimate cigarettes or tobacco	<p>'Like Mayfair really cos they're quite cheap' (F4 – 22 year old female, weekly buyer)</p> <p>'Usually Mayfair like from the shop' (M3 – 27 year old male, weekly/twice a week buyer)</p> <p>'20 Mayfairs or something like that' (M13 – 35 year old male, weekly buyer)</p>
	6.5 Would purchase a lesser amount when buying	'Erm the cheap fags I used to buy 20, I think they only sell 20 anyway but sometimes if I buy Mayfair it'll be like 10' (M3 – 27 year old male, weekly/twice a week buyer)

	legitimate cigarettes or tobacco	
	6.6 Stick to preferred brand of illicit tobacco for health concerns	‘It’s the Gold leaf that I used to smoke so...and then I mean I couldn’t find it because it was finished in the market so I bought Benson, so just changing brands like I got infection, sore throat like this so...but I stopped it was well I didn’t smoke all of the packet, I just stopped it’ (M5 – 33 year old male, daily buyer)
Sources of illicit tobacco		
Themes	Sub-themes	Quotes
1. Sources used by smokers	1.1 Shop – ‘under the counter’	<p>‘I...I buy it er off, well there is a supermarket that they sell it under the counter’ (M8 – 46 year old male, weekly buyer)</p> <p>‘There’s a shop you can go to and you usually ask for it under the counter’ (M15 – 36 year old male, weekly buyer)</p> <p>‘Normally I go up the Archway, Archway road. Holloway road just round the corner or I know 2 or 3 shops’ (M7 – 57 year old male, weekly/twice a week buyer)</p> <p>‘[...] so people bring it from the country, so they used to sell it under the till. They keep it under the till and sell it from there like [...]’ (M5 – 33 year old male, daily buyer)</p> <p>‘Yeah it’s a normal shop yeah I mean you just ask for it over the counter. Just ask for a pack of blue, a pack of green they know what you want, give it a couple of minutes they’ll come round from the back, there you go there’s a 2 ounce pack, job done’ (M13 – 35 year old male, weekly buyer)</p> <p>‘From a shop near me that do ‘em illegally’ (M3 – 27 year old male, weekly/twice a week buyer)</p> <p>‘[...] usually from...there’s 2 shops which I know this side of the river where they sell it under the stall you know...some fruit Veg newsagent store. One of them is fruit and veg the other is like off license sells alcohol and tobacco’ (M6 – 47 year old male, weekly buyer)</p> <p>‘Well I bought them in the shop near my friend’s house and she told me about this guy, she gets it from him so I just go in there when I’m near her really’ (F6 – 31 year old female, fortnightly/monthly buyer)</p>
	1.2 Abroad	‘I brought some back I don’t know if that counts as illegally buying them bought them in a shop there not the duty free and we did bring quite a lot back’ (F3 – 47 year old female, weekly buyer)

		<p>‘If I go on holiday you know...if you go on holiday outside the EU you can still buy cigarettes relatively cheap’ (M4 – 49 year old male, monthly buyer)</p> <p>‘Or if people go abroad I’ll buy it off them like [...] and stuff. So there’s that which is kind of a bit more legit I guess but they’ll just get me some and I’ll give them money’ (F6 – 31 year old female, fortnightly/monthly buyer)</p>
	1.3 Friends/family members going abroad	<p>‘[...] and if I know anyone that’s going anywhere I’ll always ask them, would you mind, if they are not a smoker’ (F3 – 47 year old female, weekly buyer)</p> <p>‘I’ve got my friend going to New York so I’m ordering another 2 or 3’ (F2 – 38 year old female, monthly buyer)</p> <p>‘My son’s girlfriend she has to travel to [...] I’d approached her to bring some back but she did say yes (F3 – 47 year old female, weekly buyer)</p> <p>‘And then plus like a lot of people...well quite a few people that I know they like sell cigarettes from abroad and stuff like they come back from holiday and they sell the cigarettes so sometimes I’ll just buy them if they are cheaper’ (F4 – 22 year old female, weekly buyer)</p> <p>‘If I know that a friend is going abroad and they can bring me back some cheap tobacco I’ll just give them some money’ (F1 – 50 year old female, monthly buyer)</p>
	1.4 Market/Street sellers	<p>‘[...] on the streets, people come up and say look I’ve got cigarettes do you want some and I say yeah.” (M12 – 47 year old male, daily/weekly/monthly)</p> <p>‘I just happen to know of you know somebody who kind of hangs around the shopping centre in [...] when I go to visit my boyfriend’ (F1 – 50 year old female, monthly buyer)</p> <p>“There’s a fellow standing around either on the main cross road corner or at the [...] there’s a corner where they stand, there’s a few places when you look around you’ll see that they are standing there and they might have a packet in their hand or something, you approach them you can get it from them’ (M6 – 47 year old male, weekly buyer)</p> <p>‘When I go to the market. My brother works down Portobello and he knows people that sell them cheap and I’ll just buy off him occasionally. My brother...I’ll sometimes say to ‘I’ve run out if your friend can get some let me know’ (F2 – 38 year old female, monthly buyer)</p>
	1.5 Friends	<p>‘My mate phones me up, I’ve known him years ever since I lived in Camden, he lives in kings cross. Where he gets it from I don’t know, I don’t ask questions so like when he’s got some...because he’s always...I’m always there with the money you see other</p>

		<p>people they'd say oh can I pay you next week but with me I'm always there with the money so I'm the first call he makes' (M14 – 53 year old male, monthly buyer)</p> <p>'I get them off a friend of mine who works in a hotel and he either sells them individually or in cartons' (M4 – 49 year old male, monthly buyer)</p> <p>'I'll get it from like my friends and stuff' (F4 – 22 year old female, weekly buyer)</p>
	1.6 Someone in the pub	<p>'I can get them from the pub [...] I just...I know the person who sells it I just go on and see him. He usually has a bag of cigarettes and tobacco' (M9 – 42 year old male, monthly buyer)</p> <p>'This guy in the pub sells them to me' (M10 – 35 year old male, weekly buyer)</p> <p>'Well there's a lady that comes in the pub and sells it, so yeah mainly off the lady in the pub' (F4 – 22 year old female, weekly buyer)</p> <p>'Oh yeah there's this fella, I can't say his name but he has like a big bag like you know one of them shopping bags and its full of cigarettes and like you see him in the Pub sometimes and I'll just ask him for a packet of tobacco whatever' (M3 – 27 year old male, weekly/twice a week buyer)</p>
	1.7 Outside train stations	<p>'[...] I see people selling it outside train stations' (F4 – 22 year old female, weekly buyer)</p>
	1.8 Known sources of illicit tobacco in the community	<p>'I know 1 or 2 old pensioners who are doing it' (M7 – 57 year old male, weekly/twice a week buyer)</p> <p>'My brother works down [...] and he knows people that sell them cheap and I'll just buy off him occasionally' (F2 – 38 year old female, monthly buyer)</p> <p>'A client of mine usually gives me a couple of packs when I see him' (M10 – 35 year old male, weekly buyer)</p>
	1.9 Bus stops/doorways	<p>'You can see them standing underneath the bus stops or anything like that and they just say you need cheap fags and they show you and if you wanna pick up a packet you just say yes' (M15 – 36 year old male, weekly buyer)</p>
	1.10 Multiple sources known/used	<p>'I've got one particular shop but I know there's two on my road that does it but I only go to one' (M13 – 35 year old male, weekly buyer)</p> <p>'[...] yeah I know loads of places' (M7 – 57 year old male, weekly/twice a week buyer)</p> <p>'[...] those are the places I buy it but I know loads of places you can get it' (M9 – 42 year old male, monthly buyer)</p> <p>'That's the 2 places I go, I'll go [...] road cos I live in Camden and if he hasn't got any I'll then take the journey down to [...] street' (M6 – 47 year old male, weekly)</p>

		<p>buyer)</p> <p>‘I know another shop does the same Marlboros and also rolling tobacco’ (M3 – 27 year old male, weekly/twice a week buyer)</p>
2. Discovery of illicit sources	2.1 Spotted illicit sellers	<p>‘You tend to pick out people that are actually selling the stuff because they’ll always look a bit like...’is anyone looking, is anyone looking’ and you tend to hone in on that’ (M11 – 43 year old male, weekly buyer)</p> <p>‘I just see the guy, the guy standing by the gate, and you know he’s selling tobacco because you’ve see him before, and you ask him he’ll give you a packet and you give him the money’ (M8 – 46 year old male, weekly buyer)</p> <p>‘Well I just...I do go to the market so you just see it, even the other day when we went past new cross train station there was just a man standing outside selling it out if his rucksack so’ (F4 – 22 year old female, weekly buyer)</p> <p>‘But if you want tobacco I mean you just have to walk up there you’ll see that there’s a fellow standing around either on the main cross road corner or at the McDonalds there’s a corner where they stand, there’s a few places when you look around you’ll see that they are standing there and they might have a packet in their hand or something, you approach them you can get it from them’ (M6 – 47 year old male, weekly buyer)</p> <p>‘But sometimes at bus stops people, you know on the weekends you know like if they feel a bit dodgy or whatever or if your friend says right that’s the people with the fags then you go over and ask them about it and that’s it’ (M3 – 27 year old male, weekly/twice a week buyer)</p>
	2.2 Approached by illicit sellers	<p>‘[...] he come to me and says do you want...he noticed I was smoking Benson and Hedges he says ‘I’ve got like cheap brands of that if you want it’ (M10 – 35 year old male, weekly buyer)</p> <p>‘On the streets, people come up and say look I’ve got cigarettes do you want some and I say yeah. It’s like they see you smoking and they walk up to you and like open the bag and say look I’ve got some cigarettes here and they cheaper than what you’ll buy in the shop and that’s it’ (M12 – 47 year old male, daily/weekly/monthly)</p> <p>‘Basically I was just approached. I was smoking a roll up outside a shop before going into the shopping centre and then somebody just said you know would you like some tobacco and I asked them what they had and then I said you know are you gonna be here next week (laughs) and they says yes I’m normally here sort of things so that was that really’ (F1– 50 year old female, monthly buyer)</p>

		‘Erm...if you’re in like the pub or even in McDonalds they would kind of approach you’ (F4 – 22 year old female, weekly buyer)
	2.3 Known sources in community spread through word of mouth	<p>‘No, at times you’ll get friends who will tell you. Ok like now I could go to maybe [...] and somebody goes oh there’s somewhere that I know where they sell...and we’ll go down there and get some, and that’s it’ (M12 – 47 year old male, daily/weekly/monthly)</p> <p>‘Well you just hear like one of my friends will say ‘he’s got cheap fags in that shop, just go in and ask for them’ and that so that would be it’ (M3 – 27 year old male, weekly/twice a week buyer)</p> <p>‘[...] like I would ask you like ok if you know someone who has Gold Leaf and you could ask someone and then someone would say yeah I have Gold Leaf’ (M5 – 33 year old male, daily buyer)</p> <p>‘It’s always when you sit down with some mates and you talk [...] you always hear about’ (M8 – 46 year old male, weekly buyer)</p> <p>‘Pretty much everybody knew’ (M1 – 46 year old male, weekly buyer)</p> <p>‘Everyone seems to know, they do. There’s always...it’s like a friend from before that I remember she used to get hers from somewhere else. It’s like amongst friends and the smokers you know we seem to know where we can go. It’s like we tell each other yeah’ (F3 – 47 year old female, weekly buyer)</p> <p>‘If it’s like people from like the area or whatever they just...you kind of just know through word of mouth so you can just say to them’ (F4 – 22 year old female, weekly buyer)</p> <p>‘Well my friend lives nearby and she buys it from there and we’ve been friends for like 12 years and she told me and that was it really’ (F6 – 31 year old female, fortnightly/monthly buyer)</p> <p>‘Ah word of mouth yeah. You don’t need to advertise that in the newspaper it goes around’ (M13 – 35 year old male, weekly buyer)</p>
3. Ease of access to illicit tobacco	3.1 Close to home – a bus ride away	‘[...] quite easily really but I do [...] when I go it’s a bus ride away from where I live’ (F3 – 47 year old female, weekly buyer)
4. Supply (frequency) of illicit tobacco purchase	4.1 Always have a ready supply	<p>‘It’s not that difficult really if you want them’ (F3 – 47 year old female, weekly buyer)</p> <p>‘But it’s not a big deal to get this stuff, it’s really not a big deal’ (M1 – 46 year old male, weekly buyer)</p> <p>‘All my friends always go abroad, yeah I’ve got my parents go abroad, I go abroad,</p>

		my brother goes abroad...I've got always...' (F2 – 38 year old female, monthly buyer)
	4.2 If one supplier is unavailable would use another	<p>'And also er sometimes there are a couple people that come to the market, and they sell it, so if I don't see them, I always go to that place and buy it there' (M8)</p> <p>'That's the 2 places I go, I'll go (?) road cos I live in Camden and if he hasn't got any I'll then take the journey down to [...] street' (M6 – 47 year old male, weekly buyer)</p> <p>'Like if you can't get off the lady in the pub or like a friend you know that it's gonna be at the market or [...] cos there are so many different sources like there's always going to be one around' (F4 – 22 year old female, weekly buyer)</p>
	4.3 Have been unable to purchase illicit tobacco and had to buy duty-paid	<p>'I had to go into a shop and buy a 12.5 g pouch of tobacco [...] and I still remember that day to this day and it hurt me' (M14 – 53 year old male, monthly buyer)</p> <p>'Yeah mostly when I run out and if I've got money on me' (M15 – 36 year old male, weekly buyer)</p> <p>'[...] if I'm on my road and I haven't passed the [...] on my way out maybe I'll grab a cheap deck' (M13 – 35 year old male, weekly buyer)</p> <p>'I try and stock up, there has been occasions of like...my stock has gone and I've had to go to the shop' (F2 – 38 year old female, monthly buyer)</p> <p>'I go to the shop when I can't get hold of cheap cigarettes' (M19 – 42 year old male, monthly buyer)</p>
	4.4 During occasions when unable to purchase illicit tobacco temporarily cut down in order to purchase duty-paid	<p>'If I buy say for instance from the shop it's gonna be dearer but I'm gonna buy less of them so I've tried that' (M11 – 43 year old male, weekly buyer)</p> <p>'If there was no cheap tobacco right, then I would buy something in the region of 25g which is a different packet' (M16 – 66 year old male, monthly buyer)</p> <p>'When I buy normal cigarettes from the shop I always just buy a 10 pack in a day just because I can't afford to smoke 20 cigarettes a day. It's always a 10pack unless it's the other, the cheap ones. Its my rationing of my habit' (F6 – 31 year old female, fortnightly/monthly buyer)</p> <p>'I'll probably be smoking I don't know erm like a packet every other day if it was like the kind of cheap stuff but if I had to go and buy them from the shop I wouldn't be buying more than a packet a week because its so expensive' (F1 – 50 year old female, monthly buyer)</p>
	4.5 If illicit tobacco became unavailable – would purchase budget brand duty paid tobacco	<p>'The cheaper brand, yeah like those ones I've shown you' (F3 – 47 year old female, weekly buyer)</p> <p>'I'll just be buying £3 a go' (M2 – 21 year old male, weekly buyer)</p> <p>'I would have to buy it over the counter' (M18 – 35 year old male, monthly buyer)</p> <p>'I'll try and maybe look for a cheaper brand because for some reason I know that</p>

		Vogue is slightly cheaper than Marlboro lights only by about a £1 but a £1 might not sound a lot' (F2 – 38 year old female, monthly buyer)
	4.6 If illicit tobacco became unavailable – would cut down	<p>'I know I'd cut down a hell of a lot' (M14 – 53 year old male, monthly buyer)</p> <p>'I'd cut down yeah [...]' (M4 – 49 year old male, monthly buyer)</p> <p>'Maybe cut down instead of having like 5 in a day I'd only have one when I go out' (F2 – 38 year old female, monthly buyer)</p> <p>'I'll probably cut down but I'll still buy it' (M9 – 42 year old male, monthly buyer)</p> <p>'But I think it might make me try a bit harder with the electronic one I'd be honest. Because I can't...financially' (F3 – 47 year old female, weekly buyer)</p> <p>'Or maybe cut down instead of having like 5 in a day I'd only have one when I go out but I wouldn't out it completely' (F2 – 38 year old female, monthly buyer)</p> <p>'I would just have to smoke 10 cigarettes a day' (F6 – 31 year old female, fortnightly/monthly buyer)</p>
	4.7 If illicit tobacco became unavailable – would quit smoking	<p>'No I think if it went away, if it wasn't available I think I would...well at this stage I would have to quit' (F4 – 22 year old female, weekly buyer)</p> <p>'I'd think about quitting' (F5 – 47 year old female, daily buyer)</p>
	4.8 If illicit tobacco became unavailable – would scrimp on other things to afford duty-paid tobacco	<p>'You'd have to sort of say right I'll cut back on the electricity or something like' (M7)</p> <p>'It'll make me think about cutting back on other things. I mean there's some point in time' (M10 – 35 year old male, weekly buyer)</p>
The illicit tobacco product		
Theme	Sub-theme	Quotes
1. Distinguishing between illicit tobacco products	1.1 Smell	<p>'Smell it you can know it weren't very good' (M13 – 35 year old male, weekly buyer)</p> <p>'There was a funny smell of it and when I smoked it...ohhh I had to throw it away it was poison' (M9 – 42 year old male, monthly buyer)</p> <p>'And the smell of them they are disgusting' (M15 – 36 year old male, weekly buyer)</p>
	1.2 Inferior packaging – spelling errors	<p>'Like the packaging doesn't look quite right, you can't really put your finger on it cos it looks...what I should do is have a real one and that one next to each other and see the difference cos then you might be able to see what was going on but...' (F6 – 31 year old female, fortnightly/monthly buyer)</p> <p>'What you buy down Holloway now you can either see that the packet is really badly printed, misspellings and whatever' (M6 – 47 year old male, weekly buyer)</p> <p>'Yeah the way...the actual feel of the plastic let alone the look of the plastic yeah, the wording you can tell, [?] the plastic...' (M13 – 35 year old male, weekly buyer)</p>

	1.3 Taste	‘If I opened that packet and took one draw of the cigarette I would know if it was wrong’ (M17 – 55 year old male, monthly buyer) ‘But it was like yeah in the day time I tried it once and I was like ‘oh this tastes a bit funny’ (F6 – 31 year old female, fortnightly/monthly buyer)
	1.4 Too cheap a price	‘They are trying to sell it for about £5 a packet which gives the game away’ (M6 – 47 year old male, weekly buyer)
2. Negative views on counterfeit tobacco	2.1 Poor quality	
	2.2 Tastes different/funny	‘Yeah I bought some before and they was like really strong and I just thought this tastes a bit funny and like’ (F4 – 22 year old female, weekly buyer)
	2.3 Disgusting/putrid	‘It tasted vile and just to look at and smell it you can know it weren’t very good’ (M13 – 35 year old male, weekly buyer)
	2.4 Not as enjoyable as legitimate tobacco	
	2.5 Described as really dry tobacco, and as having wood chippings	‘You just take a one look of it and you know oh no I can’t smoke that because it does taste different, it doesn’t taste the same and when you open the cigarette you can tell the tobacco is really dry, it’s not fine, it kinda hard and a bit chunky’ (M19 – 42 year old male, monthly buyer) ‘It’s like it’s got big bits of bark or something so it does make you worry a bit’ (F4 – 22 year old female, weekly buyer) ‘It looked like bloody painting shavings; it was foreign tobacco that the shop down the road from me used to get and it dried out too quickly’ (M13 – 35 year old male, weekly buyer)
	2.6 Would not purchase counterfeit tobacco	‘If I suspect that the tobacco is bootleg so it’s actually not made by the company I won’t buy it’ (M6 – 47 year old male, weekly buyer)
3. Variation in quality of tobacco by illicit source	3.1 Shop – good quality and not believed to be counterfeit	‘But the ones under...in the shop under the counter are quite...I think they’re quite...they are not as bad as you would get from the people on the streets’ (M15 – 36 year old male, weekly buyer) ‘I’d like to think that it was just like cigarettes that were bought in another country and sort of smuggled in or something like that rather than that they were some kind of sub product that is like a bootleg version of it’ (F6 – 31 year old female, fortnightly/monthly buyer) ‘But like I said what I get in the shop is all genuine European stuff’ (M6 – 47 year old male, weekly buyer) ‘Erm...I think it’s just from another country, you know. And it’s cheaper in another

		country so, I think its legitimate in that country but they just smuggle it over so' (M3 – 27 year old male, weekly/twice a week buyer)
	3.2 Duty free seen as genuine tobacco because has duty paid tax discs	<p>'But they both got the same tax disc on the same price there's a slight difference in the quality of the tobacco itself but they are genuine Golden Virginias' (M6 – 47 year old male, weekly buyer)</p> <p>'I do look on it and this one does say duty free on it which kind of makes me a bit of at ease so I don't mind duty free' (M13 – 35 year old male, weekly buyer)</p>
	3.3 Cigarettes/tobacco from market/street sellers - poor quality and counterfeit	
4. Health warnings on illicit tobacco products	4.1 Presence of health warnings on illicit cigarette and tobacco packs (Polish, German, Arabic, Spanish)	<p>'They are foreign most of the time so. Unless you speak German you don't really know' (F4 – 22 year old female, weekly buyer)</p> <p>'Well they usually just have the writing ones and sometimes they have the sort of like pictures but I can't remember. Usually it's just written in another language, the warning but I don't really know what language it would be. I think I've seen it when it was Spanish once or twice, maybe I don't know Turkish. I can't really say what languages it is all the time, they are different but it's always foreign looking, the writing is always foreign' (F6 – 31 year old female, fortnightly/monthly buyer)</p> <p>'Yeah they do, in some other country's language' (M3 – 27 year old male, weekly/twice a week buyer)</p> <p>'Health warnings, foreign language warnings. Sometimes they come in the cellophane wrapper sometimes they don't' (M13 – 35 year old male, weekly buyer)</p>
	4.2 Seen visual health warnings on illicit tobacco packs	<p>'Oh yeah they've got horrible pictures on sometimes as well especially with Thailand and that they've got really horrible pictures' (F2 – 38 year old female, monthly buyer)</p> <p>'...and sometimes they have the sort of like pictures but I can't remember' (F6 – 31 year old female, fortnightly/monthly buyer)</p>
	4.3 Have not seen visual health warnings on illicit tobacco packs	<p>'Not really [...] and it doesn't have like the photos and stuff that they've got now' (F4 – 22 year old female, weekly buyer)</p> <p>'There's no visual picture on it no. I think that's a European directive rather than a worldwide agreement' (M10 – 35 year old male, weekly buyer)</p>
Price of illicit tobacco		

Themes	Sub-themes	Quotes
1. Prices reportedly paid for illicit tobacco	1.1 £25 - £30 for 200 cigarettes	‘About £27, depending where you go’ (F2 – 38 year old female, monthly buyer)
	1.2 £3 - £5 (B&H)	‘It’s like £3 for a 20 pack’ (F4 – 22 year old female, weekly buyer) ‘I think they are about 5 quid a pack’ (F6 – 31 year old female, fortnightly/monthly buyer) ‘£3’ (M10 – 35 year old male, weekly buyer)
	1.3 £4.50 (Marlboro lights)	‘£4.50 for 20 pack of Marlboros’ (M3 – 27 year old male, weekly/twice a week buyer)
	1.4 £4.50 (Gold leaf)	‘It was 4 quid earlier then they...I mean now he increased his price its £4.50’ (M5 – 33 year old male, daily buyer)
	1.5 £5/£6 (cutters choice)	‘Erm...the 50g they are like £6, £5’ (F4 – 22 year old female, weekly buyer)
	1.6 £8 (Drum)	‘I normally pay, for 50g I just pay £8 yeah’ (F1 – 50 year old female, monthly buyer)
	1.7 £9 (Old Holborn)	‘£9 job done’ (M13 – 35 year old male, weekly buyer)
	1.8 £7 - £9.50 (Golden Virginia)	‘The cheapest I can get it for is £7 for 50g’ (M6 – 47 year old male, weekly buyer)
	1.9 £4.50 (Golden Virginia)	‘Well £4.50 for a 50g pack’ (M3 – 27 year old male, weekly/twice a week buyer)
	1.10 Concern that the price of illicit tobacco is steadily going up	‘Well the cheap stuff has gone up a bit’ (F4 – 22 year old female, weekly buyer) ‘It’s the petrol prices that have pushed the illegal stuff up and up and up’ (M13 – 35 year old male, weekly buyer)
2. Price as justification for illicit tobacco purchase	2.1 Illicit tobacco a bargain	‘The price. You’re gonna buy it at half price ain’t you. You’ll buy anything at half price wouldn’t you if somebody says look that’s half price. And you’re getting it regular’ (M9 – 42 year old male, monthly buyer) ‘When you’ve got to pay mortgage, bills this and the other you’re sort of thinking right I’ll try and buy cheaper when I can and try to stock up... because it’s cheaper, you get more for your money, you end up getting double’ (F2 – 38 year old female, monthly buyer) ‘So it’s purely financial, literally the only reason’ (F6 – 31 year old female, fortnightly/monthly buyer) ‘Just because it saves money. I mean if I’m going to smoke I may as well do it the cheapest possible way really’ (F1 – 50 year old female, monthly buyer) ‘It’s solely the price, nothing else. The only reason I buy the cheap stuff is solely the price’ (M6 – 47 year old male, weekly buyer) ‘Yeah just because you can save a little bit of money, that’s all! Obviously you’re going to buy it cheaper if it’s alright, you’re going to buy it cheaper you know’ (M3 –

		27 year old male, weekly/twice a week buyer)
	2.2 Response to legitimate tobacco price increases	<p>‘Well I can’t afford to buy the ones in the shop...it’s better for your budget to buy it cheap’ (M9 – 42 year old male, monthly buyer)</p> <p>‘Because cigarette have gone up generally. When I first started smoking I get a 10 pack of fags for £1.70 and now 10 pack of fags are £3.30 like almost double that’ (M3 – 27 year old male, weekly/twice a week buyer)</p> <p>‘But then as the prices gone up and there’s very little difference between brands I started buying the cheap cigarettes’ (M10 – 35 year old male, weekly buyer)</p> <p>‘Price of tobacco is going up, it’s going absolutely...it’s gone mad’ (M13 – 35 year old male, weekly buyer)</p>
3. Beliefs on why illicit tobacco is cheap	3.1 Tax not paid on these products	‘Erm...well you’re not paying tax on the ones from duty free or from abroad or they are not paying as much tax as we are’ (F2 – 38 year old female, monthly buyer)
	3.2 Stolen and resold	‘I don’t know they could be stolen’ (F2 – 38 year old female, monthly buyer)
	3.3 Purchased abroad in bulk	<p>‘I assume they’ve actually gone you know on a ferry...gone across to France to a hypermarket and stoked up on a load of tobacco and that’s not an illegal thing in itself but what they are doing obviously is selling it and that part of it is illegal’ (F1 – 50 year old female, monthly buyer)</p> <p>‘I just...I assume they’ve actually gone you know on a ferry...gone across to France to a hypermarket and stocked up on a load of tobacco’ (F1 – 50 year old female, monthly buyer)</p>
4. Negative views on tobacco taxation	4.1 Belief that smokers are targeted by tobacco taxation	‘But you know basically it boils down to the government are over taxing it’ (M6 – 47 year old male, weekly buyer)
	4.2 Do not believe high price encourages quitting	<p>‘Yeah it annoys me why we pay so much tax, they think that people are going to stop smoking; they know people are not going to stop smoking so they take advantage of it’ (F2 – 38 year old female, monthly buyer)</p> <p>‘Right that is total bollony. I mean history has shown that addictive substances whether it be tobacco, alcohol or any sort of drugs will always be consumed by a portion of the population and no matter how much you tax it or raise the price an addict will always get his fix and nicotine is one of the most addictive substances there is you know what I mean’ (M6 – 47 year old male, weekly buyer)</p> <p>‘But then again you know the way they tax tobacco sky high is hypocritical it’s nothing to do with wanting people to give up smoking it’s just a tax take’ (M10 – 35 year old male, weekly buyer)</p>
	4.3 Believe the government	‘I think it’s kind of mixed like I think they do want people to cut down smoking

	does want smokers to quit	because like the cost of ...like the effects of smoking, like the healthcare cost and everything that is obviously a lot money' (F4 – 22 year old female, weekly buyer)
	4.4 Government just want money (profitable for them)	<p>'The government just wants the money that's why, because they know so many people smoke, it's an easy thing to make money off even if they put the prices up people are still going to buy it' (F4 – 22 year old female, weekly buyer)</p> <p>'They say they're trying to force people to stop smoking by bringing up the price but really they're just greedy. Nah I think its profit, profit related. Its money money money, they don't care, they don't care about people's health. No I don't think they do I'm afraid' (F6 – 31 year old female, fortnightly/monthly buyer)</p> <p>'If you think about what the government charges in terms of tax on alcohol and tobacco they are making lots of money' (F1 – 50 year old female, monthly buyer)</p>
	4.5 General anti-government views	<p>'I don't think that the government is necessarily participating in legal activities anyway. You could say that the ministry of defence are spending millions billions and billions on illegal warfare you know. So you've got you know kind of organised crime if you like but you could say depending on your political view that the government are organised crime....you know they are organising crime all the time, but they somehow can get away with it' (F1 – 50 year old female, monthly buyer)</p> <p>'Stop funding wars in other countries that have got f**k all to do with us then I'm sure we can make a few savings somewhere along the line you know what I mean just stop. Stop lining their pockets with like all this stuff, stop having big expense accounts down the houses of commons and all that' (M13 – 35 year old male, weekly buyer)</p>
Illicit tobacco traders		
Themes	Sub-themes	Quotes
1. Perceptions of illicit tobacco traders	1.1 Illicit tobacco sellers viewed quite positively as providing a service	<p>'They are sent from heaven. Why am I going to pay £13 when I can pay £7?' (M17 – 55 year old male, monthly buyer)</p> <p>'Well it doesn't really bother me so much that I'm actually funding that because they are... you know at the ends of the day they are providing me a service and providing other people a service' (F1 – 50 year old female, monthly buyer)</p> <p>'He's doing me a favour I'm doing him a favour by buying it off him, I look at it that way' (M13 – 35 year old male, weekly buyer)</p>
	1.2 Sellers described as	'They are pretty friendly' (F4 – 22 year old female, weekly buyer)

	friendly	
	1.3 Sellers trying to make a living – a little money on the side	<p>‘Don’t get me wrong they are earning a living I mean they’ve gotta do...they’ve gotta earn a living, a lot of them have got children so they’ve gotta be fed’ (M14 – 53 year old male, monthly buyer)</p> <p>‘I mean it’s difficult to say because they obviously...they know there’s a market for it and obviously they’re making a profit’ (F6 – 31 year old female, fortnightly/monthly buyer)</p> <p>‘They probably trying to scratch round for a living and that’s as much as I thought about it. I sort of think I guess they have to do something’ (F1 – 50 year old female, monthly buyer)</p> <p>‘People smuggle cigarettes sell it to the shops make a bit of money from it’ (M3 – 27 year old male, weekly/twice a week buyer)</p> <p>‘They’re just trying to make ends meet just as I am trying to save a few quid’ (M13 – 35 year old male, weekly buyer)</p>
	1.4 Market sellers particularly viewed as untrustworthy and dubious	<p>‘To be honest with you the ones in the market don’t...I don’t trust them as much as I buy from people from like tax free cos tax free I know they are just...because there’s no tax whereas the ones in the market sometimes you are a bit dubious are they ok, what’s in them you know’ (F2 – 38 year old female, monthly buyer)</p>
2. Traders’ sales techniques	2.1 Sellers approach smokers	<p>‘It’s like they see you smoking and they walk up to you and like open the bag and say ‘look I’ve got some cigarettes here and they are cheaper than what you’ll buy in the shop and that’s it’ (M12 – 47 year old male, daily/weekly/monthly)</p>
	2.2 Sellers build a level of trust before illicit tobacco sales	<p>‘Yeah I know people...I know shops that other people I know have got em off the shops but I mean they’re not gonna sell em to everyone that walks into the shop and wants them under the counter. I think if you’re a local in the area and you’re in the shops all the time and they know your face so then yeah they’d...I’ll buy em. But I could walk in like say up the road and say have you got any cheap tobacco and he’s gonna go who are you?’ (M15 – 36 year old male, weekly buyer)</p>
	2.3 Sellers in shops described as edgy	<p>‘I make sure no one else is in the shop like cos they get all a bit dodgy and everything and then they look at you and it’s like ‘Yeah mate my friend buys the cheap cigarettes, give me some cigarettes’ so that’s it’ (M3 – 27 year old male, weekly/twice a week buyer)</p>
	2.4 Sales of illicit tobacco in shops required a signal or slang term	<p>‘There are several local shops and you just go in and bang on the counter and if you don’t...even like I’ve been to shops where someone’s told me they have them and the shop keeper doesn’t know me so I’ll just sort of go ‘can I have a packet of Marlboro</p>

		lights' bang the counter, so there's the sign' (F5 – 47 year old female, daily buyer) 'I just asked for the Bensons and I kind of gave him a little wink' (F6 – 31 year old female, fortnightly/monthly buyer) 'They said to me yeah all you've got to do is go in there and say 2 ounce pouch of golden Virginia tap your finger on the table like that and that's it, then they know' (M13 – 35 year old male, weekly buyer)
	2.5 Sellers encourage bulk purchase	'Yeah if you buy more like...especially with the tobacco if you buy more of it then they'll put the price down a bit' (F4 – 22 year old female, weekly buyer)
Views on the impact of illicit tobacco trade		
Themes	Sub-themes	Quotes
1. Impact on smoking behaviour	1.1 Smokes more because can access cheap tobacco	'I think I smoke as much as I want to because I can get it so cheap like I said (M18 – 35 year old male, monthly buyer) 'I've found that when you buy them cheap you end up putting one out one in' (F2 – 38 year old female, monthly buyer) 'It makes you think to cut down but then because it's cheap it's kind of you don't have to cut down so' (F4 – 22 year old female, weekly buyer) 'I suppose probably more just because of the way I buy 20. Like I'd buy like 4 packs of 20 at one go and just purely because there's more cigarettes. Like you know when you go on holiday you buy a big thing you just smoke more basically because they're there' (F6 – 31 year old female, fortnightly/monthly buyer)
	1.2 Cheap tobacco a means of cutting down	'No its not, no its because I wanted to cut down at the same time then I started buying cheap stuff because not only do roll-ups cut me down, it's also the cheap stuff. Because like I said you get a scratchy throat and you cough this really dry cough and after the tenth cigarette you say no' (M1 – 46 year old male, weekly buyer) 'So actually...you end up smoking less, I end up smoking less because I have to stop what I'm doing in order to roll a cigarette' (F1 – 50 year old female, monthly buyer) 'I do smoke less cos I don't like them' (M10 – 35 year old male, weekly buyer)
2. Impact on the local community	2.1 Illicit tobacco viewed as beneficial to the community as it provides cheap tobacco to smokers	'Well I think cheap tobacco has made more benefit to the community than the Police and the gangsters. They are doing somebody a favour; they are actually saving people money' (M9 – 57 year old male, weekly buyer) 'In one way it's helping people in like poorer communities and stuff because they're getting things cheaper' (F4 – 22 year old female, weekly buyer)

		<p>‘To be honest a lot of people would see it has a good thing because there’s a lot of people who really really don’t have any money at all. People who are on benefits and stuff some people just get so bored all they do is sit there smoking and drinking. But you know it’s depressing not having a job and stuff like that and I think a lot of people in that sort of circumstance would say I’m glad this is available to me, I’m electing to buy this. I know it might be worse for me, but I’m priced out of the market for the other one so this is allowing people to have access to something that they couldn’t usually afford’ (F6 – 31 year old female, fortnightly/monthly buyer)</p>
	2.2 Concern over illicit tobacco encouraging criminality in the community	<p>‘But if you look at it in the long run obviously there’s more people like doing illegal activities just from selling it, even from buying its well quite illegal I suppose, yeah, it’s bad really’ (F4 – 22 year old female, weekly buyer)</p>
	2.3 Illicit tobacco has no effect on the community	<p>‘None whatsoever’ (M13 – 35 year old male, weekly buyer)</p>
	2.4 Purchase of illicit tobacco likened to purchase of pirate DVDs or downloading music illegally	<p>‘No...I kind of like view it the same as you get people going round going ‘DVD,’ do you know what I mean? In fact I’ve seen people doing both, selling DVDs and cheap tobacco so...’ (M4 – 49 year old male, monthly buyer)</p> <p>‘It’s just like everything really these days like people buy DVDs, like pirate DVDs because you can get such good copies or even like people like downloading illegal music everything. So it is bad but then I think just in today’s society it’s just kind of the norm’ (F4 – 22 year old female, weekly buyer)</p> <p>‘I mean it’s the same when you see people selling pirate DVDs’ (F1 – 50 year old female, monthly buyer)</p> <p>‘You know I suppose it’s a bit like pirate DVDs’ (M10 – 35 year old male, weekly buyer)</p>
3. Impact on health	3.1 Concern over content and health effects of counterfeit tobacco	<p>‘But you smoke it and after a couple of days it gets very chesty on you, you know and its all of a sudden you do feel like...it’s not necessary straight away that you smoke the cigarette that it tastes wrong but after 2 or 3 days of smoking I can feel it like it gets really chesty and I’m coughing up a lot more’ (M6 – 47 year old male, weekly buyer)</p> <p>‘I do worry about that quite a lot. That’s my main reason why I wanna cut down’ (F4</p>

		<p>– 22 year old female, weekly buyer)</p> <p>‘If I can feel that it tastes weird I think oh God this isn’t right. Yeah I wouldn’t really wanna be having coughing fits and cancer and all the rest of it. Sometimes it makes me feel a bit ill when I buy the wrong kind of ones.’ (F6 – 31 year old female, fortnightly/monthly buyer)</p> <p>‘With those you really don’t know what you’re gonna be smoking. They could be putting all sorts of stuff in there but unfortunately it’s a price you have to pay’ (M10 – 35 year old male, weekly buyer)</p> <p>‘But if it’s the fake stuff then like I said God knows what they put in that and God knows what effect it can have on your body and stuff’ (M13 – 35 year old male, weekly buyer)</p>
	3.2 Would still go for cheaper tobacco/cigarette regardless of health concerns	<p>‘It has crossed my mind before are they ok, are they legit, are they...you hear some stories you know the ones you buy they can you know be not the proper stuff or sometimes you think you know what cigarettes aren’t good for you anyway how much more harm can they do but I will still...that doesn’t make me...if I’ve got a choice from buying some from the market or from the shop I would still buy the cheaper ones’ (F2 – 38 year old female, monthly buyer)</p>
	3.3 Perception that the safety of the tobacco products purchased depended on the look of the seller and the packaging of the product	<p>‘If it’s like a certain packaging I’ll check and then I’ll say oh does that one look same and if it doesn’t I’ll get it in the hope that it’s a bit more normal tasting’ (F6 – 31 year old female, fortnightly/monthly buyer)</p> <p>‘Not really, not really becauseI mean they’ve all got like you know the government...they are taped, they’ve got the seals and stuff so you know that you know, you know that they are just the same, they are coming from the safe factory in Germany or wherever. They are licensed to sell and to manufacture the products’ (F1 – 50 year old female, monthly buyer)</p>
	3.4 Acknowledgement that ALL tobacco is harmful	<p>‘I know cigarettes in general are bad for your health’ (F6 – 31 year old female, fortnightly/monthly buyer)</p> <p>‘I don’t say any cigarette is good for you’ (M10 – 35 year old male, weekly buyer)</p> <p>‘Yeah I’ll be lying if I said I didn’t, yeah I do think about it. But smoking does you harm anyway, I mean what more could it possibly do I suppose’ (M13 – 35 year old male, weekly buyer)</p>

Moral stance on illicit tobacco trade		
Themes	Sub-themes	Quotes
1. View on the illegality of illicit tobacco trade	1.1 Harmless trade and not bothered by the illegality of illicit tobacco	<p>‘At the end of the day it’s not my problem, when it starts affecting me personally then I’ll start thinking about it but when it’s not affecting me personally I don’t care’ (M15 – 36 year old male, weekly buyer)</p> <p>‘Doesn’t bother me whatsoever, doesn’t bother me whatsoever’ (M13 – 35 year old male, weekly buyer)</p>
	1.2 Illegality of the illicit tobacco trade not thought of	‘I don’t ask questions, all I’m bothered about is I can get it cheap and that’s it’ (F2 – 38 year old female, monthly buyer)
	1.3 Uncomfortable when purchasing illicit tobacco	<p>‘Even when I go I’ve been going for such a long time I still kind of keep glancing round and you know it’s not something I’m really comfortable with but then when I come away I’ve got you know I have got them cheaper’ (F3 – 47 year old female, weekly buyer)</p> <p>‘It does make you worry a bit...like even talking about it now you’re feeling a bit embarrassed because it’s not really the right thing to do’ (F4 – 22 year old female, weekly buyer)</p> <p>‘I don’t really feel comfortable about it. Erm...you know I appreciate at the end of the day the tax take is needed to support public services’ (M10 – 35 year old male, weekly buyer)</p>
2. Views on illicit tobacco trade’s connection to organised crime and terrorism	2.1 Believe that illicit tobacco could be connected to organised crime and fund terrorism	<p>‘I mean I think there could be sort of organised gangs and stuff behind it in the long run which might be horrible’ (F6 – 31 year old female, fortnightly/monthly buyer)</p> <p>‘So yeah there’s bound to be sort of criminal elements to say people selling cheap tobacco or whatever’ (F1 – 50 year old female, monthly buyer)</p> <p>‘More and more I don’t know organised crime or whatever is getting involved in tobacco smuggling because it is an easy way to do it and the sentences for that are rather lenient compared to other things’ (M6 – 47 year old male, weekly buyer)</p> <p>‘It’s like there’s always a nasty underbelly to it. But then there’s a nasty underbelly to smoking itself and part of it is you close your mind off’ (M10 – 35 year old male, weekly buyer)</p>
	2.2 Believe that only counterfeit tobacco is connected to organised crime and fund terrorism	‘Right the duty free stuff I don’t think is part of organised crime, I just think that somebody’s trying to make a few quid here and there there’s nothing organised about it. But all this fake stuff absolutely that’s part of organised crime’ (M13 – 35 year old male, weekly buyer)

	2.3 Believe this message is a ploy by the government	‘I’m yet to see anyone who’s right at the top connected with terrorism links or anything like that being done for importing tobacco, I’ve not seen it, it’s just... to me it’s becoming like another urban myth’ (M10 – 35 year old male, weekly buyer)
	2.4 Not thought of and not bothered by it	‘I don’t really see it that way though; I don’t see it that way. I just see it like when you go to the market and your buying you know a top or whatever that’s all I see, I don’t look any further than that’ (F2 – 38 year old female, monthly buyer) ‘But I don’t know you try not to think about it until you start talking about it, I didn’t really think...I didn’t think so much about it, I don’t think, really’ (F4 – 22 year old female, weekly buyer) ‘But at the end of the day you know it doesn’t really bother me you know. I’m not gonna have sleepless nights over it so’ (M6 – 47 year old male, weekly buyer) ‘It might sound bad but I’m not really too bothered’ (M3 – 27 year old male, weekly/twice a week buyer)
3. Views on the sale of illicit tobacco to under-aged smokers	3.1 Sale to under-aged kids viewed as unacceptable	‘It’s not a good thing for young kids to be able to just go and buy tobacco’ (F1 – 50 year old female, monthly buyer) ‘Personally I’ll be horrified. I haven’t seen the guy I buy from do that, if I did I would go seeking out someone else and cut him out as a supplier to me’ (M10 – 35 year old male, weekly buyer) ‘I mean if they gonna sell...my issue is that if they’re gonna break the law and sell cheap tobacco what is to stop them as well from also selling any old tobacco or smoking products to people that are under the age of what is it now 16, 18 as well. So there’s a kick back to it. Cos I’m a dad so [?] is my daughter going down the road smoking and s**t, obviously I don’t want that to happen’ (M13 – 35 year old male, weekly buyer)
	3.2 Under-aged smokers would get their tobacco one way or another	‘You know those underage smokers, ultimately they get older friends or older siblings who go out and buy the tobacco or the cigarettes for them in shops or they steal them from their parents as simple as that. So they are gonna get it one way or the other if they really want to you know... So it’s not that much different really to approaching somebody who’s selling... cheap cigarettes’ (F1 – 50 year old female, monthly buyer) ‘I’ve never looked at it that way cos when I was younger to be honest I managed to buy cigarettes when I was under 16 from the shop’ (F2 – 38 year old female, monthly buyer)

	3.4 Not thought of	'I mean I haven't even thought of what you just said about people...about kids going up to them' (M6 – 47 year old male, weekly buyer)
Tackling illicit tobacco trade		
Themes	Sub-themes	Quotes
1. Discouraging illicit tobacco purchase	1.1 Would stop purchasing illicit tobacco if the price of legal tobacco was reduced	'Well English prices being cheaper' (M6 – 47 year old male, weekly buyer)
	1.2 Would stop purchasing illicit tobacco if it tasted horrible	'If they tasted horrible, if they tasted horrible then I would be like no they don't taste the same then I wouldn't, other than that it wouldn't stop me' (F2 – 38 year old female, monthly buyer) 'But yeah just because if like they were horrible I wouldn't buy them obviously' (M3 – 27 year old male, weekly/twice a week buyer)
	1.3 Would stop purchasing illicit tobacco if quit smoking	'Or if you know I don't know if I were to stop smoking for whatever reason' (M6 – 47 year old male, weekly buyer)
	1.4 Would stop purchasing illicit tobacco if there was a complete ban on smoking	'Erm...if cigarettes as a whole was banned i would stop buying cheap tobacco because then it would be quite apparent that drug dealers the people who pushed other drugs were in on the act as well. And if cigarettes as a whole was banned there wouldn't be anywhere to smoke' (M10 – 35 year old male, weekly buyer)
	1.5 Would stop purchasing illicit tobacco if earning more money	'Give me more money at work, get a pay rise or something' (M3 – 27 year old male, weekly/twice a week buyer)
	1.6 Would stop purchasing illicit tobacco if it was linked to drug dealing	'But yeah certainly if i knew that there were drugs...if I knew there was a direct link to drugs and I saw evidence of it rather than rumour then yeah it would stop me' (M10 – 35 year old male, weekly buyer)
	1.7 Would stop purchasing illicit tobacco if illicit tobacco sellers were absent	'Only if there weren't there, if they weren't there then obviously I can't do it' (M11 – 43 year old male, weekly buyer) 'Erm...probably if that guy stopped selling it' (F6 – 31 year old female, fortnightly/monthly buyer) 'Well again the only way to stop that is for the government.... is to get rid of these people' (M6 – 47 year old male, weekly buyer)

	1.8 Would stop purchasing illicit tobacco if there was Draconian enforcement for being caught with illicit tobacco	‘Severely draconian punishment for being caught with it you know I mean that’s the only thing that would stop me’ (M6 – 47 year old male, weekly buyer)
	1.9 No feasible reason for quitting the purchase of illicit tobacco	‘I don’t know I’m just trying to think of some...feasible scenario but I can’t think of one really. I can’t think of a realistic scenario for me just to say well I’ll never buy it again’ (F1 – 50 year old female, monthly buyer)
	1.10 Absence of illicit tobacco would drive smoker to purchase legitimate tobacco	‘It’s a case of well you know I’m just gonna have to pay what everyone else has to pay in this country you know’ (F1 – 50 year old female, monthly buyer)
	1.11 Absence of illicit tobacco would result in cutting down on tobacco consumption	‘If there was no cheap tobacco right, then I would buy something in the region of 25g (instead of 50g) which is a different packet’ (M16 – 66 year old male, monthly buyer) ‘No I think it would definitely make me cut down if it (illicit tobacco) wasn’t available’ (F4 – 22 year old female, weekly buyer)
	1.12 If unable to purchase illicit tobacco would scrimp and save to afford legitimate tobacco	‘If I had to pay that price for it I would be scrimping and saving on other things you know so I would be buying less food or you know it won’t be a piece of chicken or piece of meat everyday on the plate’ (M6 – 47 year old male, weekly buyer)
	1.14 If unable to purchase illicit tobacco would travel abroad to low tax jurisdictions	‘I’d make my way across to Holland or Belgium and buy it up you know what I mean’ (M6 – 47 year old male, weekly buyer)
2. Possibility of eliminating illicit tobacco	2.1 Belief that it would be impossible to get rid of the illicit tobacco trade	‘It’ll never happen that there won’t be any more cheap tobacco, there’ll always be cheap tobacco. You’ll never get rid of it’ (M17 – 55 year old male, monthly buyer) ‘No I don’t think so. That’s like saying getting rid of drugs, getting rid of crime, getting rid of...nah how could they? I don’t think that’s possible, it’ll always be there to an extent’ (F6 – 31 year old female, fortnightly/monthly buyer)
	2.2 Would support the eradication of illicit tobacco trade	‘Yeah I would support it cos it’s not really a good thing in the long run’ (F4 – 22 year old female, weekly buyer) ‘Yeah I would in a way yeah, cos it’ll help me stop cigarettes as well’ (M3 – 27 year old male, weekly/twice a week buyer)
	2.3 Would not support the	‘I wouldn’t support that no cos then it would stop me getting my cheaper cigarettes’

	eradication of illicit tobacco trade	(F2 – 38 year old female, monthly buyer) 'No not really. You know...I mean I think people should have the choice really what they do with their money'(F1 – 50 year old female, monthly buyer)

Appendix 7.12: Illicit tobacco products purchased by participants



Appendix 8.1: Smoking Toolkit Study Questionnaire used for data collection in 2012

Black = All respondents aged 40 and over

Blue = All respondents

Red = Smokers who stopped more than a year ago (q632a1 = 5)

Green = Current smokers (q632a1 = 1/2/3)

Purple = Smoked in past year (q632a1 = 1/2/3/4)

Orange = Current cigarette smokers and recent ex-smokers (q632a2 = 1/2/4)

And can I just check

If [Q9295 < 40] continue at question 199

Question 501

4568L1

EQ5Da

By placing a tick in one box only, please indicate which statements best describe your own health state today.

Mobility

- 1 ☐ I have no problems in walking about
- 2 ☐ I have some problems in walking about
- 3 ☐ I am confined to bed

Question 502

4569L1

EQ5Db

By placing a tick in one box only, please indicate which statements best describe your own health state today.

Self-Care

- 1 ☐ I have no problems with self-care
- 2 ☐ I have some problems washing or dressing myself
- 3 ☐ I am unable to wash or dress myself

Question 503

4570L1

EQ5Dc

By placing a tick in one box only, please indicate which statements best describe your own health state today.

Usual Activities (e.g. work, study, housework, family or leisure activities)

- 1 ☐ I have no problems with performing my usual activities
- 2 ☐ I have some problems with performing my usual activities
- 3 ☐ I am unable to perform my usual activities

Question 504

4571L1

EQ5Dd

By placing a tick in one box only, please indicate which statements best describe your own health state today.

Pain/Discomfort

- 1 ☐ I have no pain or discomfort
- 2 ☐ I have moderate pain or discomfort
- 3 ☐ I have extreme pain or discomfort

Question 505

4572L1

EQ5De

By placing a tick in one box only, please indicate which statements best describe your own health state today.

Anxiety/Depression

- 1 ☐ I am not anxious or depressed
- 2 ☐ I am moderately anxious or depressed
- 3 ☐ I am extremely anxious or depressed

To help people say how good or bad a health state is, we have drawn a scale (rather like a thermometer) on which the best state you can imagine is marked 100 and the worst state you can imagine is marked 0.

Question 506

Maximum 100
4573L3

We would like you to indicate on this scale how good or bad your own health is today, in your opinion. Please do this by drawing a line from the box below to whichever point on the scale indicates how good or bad your health state is today.

Worst Best

Imaginable Imaginable

Health State Health State

1 10 20 30 40 50 60 70 80 90 100

Question 101

1101L1

SHOW SCREEN

Q632a1

Which of the following best applies to you?

- 1 ☐ 1. I smoke cigarettes (including hand-rolled) every day
- 2 ☐ 2. I smoke cigarettes (including hand-rolled), but not every day
- 3 ☐ 3. I do not smoke cigarettes at all, but I do smoke tobacco of some kind (eg. pipe or cigar)
- 4 ☐ 4. I have stopped smoking completely in the last year
- 5 ☐ 5. I stopped smoking completely more than a year ago
- 6 ☐ 6. I have never been a smoker (ie. smoked for a year or more)
- 7 ☐ DK

If [Q101 , 5] otherwise continue at question 8102

Question 701

4447L3

SHOW SCREEN

NEWW70a1

How old were you when you stopped smoking?

IF NECESSARY: If you cannot remember your exact age, please provide an estimate

If [ANS2 < 121 and ANS2 >= 0 or ANS2 = "DK" or ANS2 = "dk"] continue at question 88701

Question 8701

PLEASE NOTE YOU NEED TO ENTER A NUMBER
BETWEEN 0 AND 120 OR 'DK'.

HOWEVER YOU ENTERED:

<Question 701>

PLEASE TAB 'OK' TO AMEND

Question 545

Question only asked, if [Q101 , 1 TO 3]

1303L1

SHOW SCREEN

Q632e45

Which of the following best describes you?

- 1 ☐ 1. I REALLY want to stop smoking and intend to in the next month
- 2 ☐ 2. I REALLY want to stop smoking and intend to in the next 3 months
- 3 ☐ 3. I REALLY want to stop smoking but I don't know when I will
- 4 ☐ 4. I want to stop smoking and hope to soon
- 5 ☐ 5. I want to stop smoking but haven't thought about when
- 6 ☐ 6. I think I should stop smoking but don't really want to
- 7 ☐ 7. I don't want to stop smoking
- 8 ☐ DK

If [Q101 , 1 TO 3] otherwise continue at question 76301

Question 6314

1614L4

SHOW SCREEN

q632e14

On average about how much per week do you think you spend on cigarettes or tobacco?

Please only answer this if you are fairly confident that you know.

IF NECESSARY SAY: Please give your answer to the nearest pound, we do not need an exact figure.

If [ANS2 < 501 and ANS2 > 0 or ANS2 = "DK" or ANS2 = "dk"] continue at question 88002

Question 8802

PLEASE NOTE YOU NEED TO ENTER A NUMBER BETWEEN 1 AND 500 OR 'DK'.

HOWEVER YOU ENTERED:

<Question 6314>

PLEASE TAB 'OK' TO AMEND

If [Q101 , 1 , 2 , 4] otherwise continue at question 6311

Question 6301

1618L1

SHOW SCREEN

q632x1

How many cigarettes <?> you usually smoke?

INTERVIEWER: Please allow respondent to choose how they would prefer to answer.

NOTE: If respondent says they do not smoke every week, choose 'per week' and enter '0' at next question.

- 1 ☐ 1. Per day
- 2 ☐ 2. Per week
- 4 ☐ DK

Question 6305

Question only asked, if [Q6301 , 1]

1619L4

SHOW SCREEN

q632a9

How many cigarettes per day <?> you usually smoke?

INTERVIEWER: If respondent says 'Don't know', encourage them to give their best estimate

If [Q6301 , 1] otherwise continue at question 88003

[ANS3 < 101 and ANS3 > 0 or ANS3 = "0" or ANS3 = "00" or ANS3 = "000" or ANS3 = "0000" or ANS3 = If "DK" or ANS3 = "dk"] continue at question 88003

Question 8803

PLEASE NOTE YOU NEED TO ENTER A NUMBER

LESS THAN 100 OR 'DK'.

HOWEVER YOU ENTERED:

<Question 6305>

PLEASE TAB 'OK' TO AMEND

If [Q6305 = 9998] continue at question 6307

Question 6306

Question only asked, if [Q6305 < 0]
1623L4

SHOW SCREEN

q632e15

How many of these do you think are hand-rolled?

INTERVIEWER: If respondent says 'Don't know', encourage them to give their best estimate. You will not be able to type in a number larger than the previous question.

If [Q6305 < 0] otherwise continue at question 88004

[ANS4 < 101 and ANS4 > 0 or ANS4 = "0" or ANS4 = "00" or ANS4 = "000" or ANS4 = "0000" or ANS4 = If "DK" or ANS4 = "dk"] continue at question 88004

Question 8804

PLEASE NOTE YOU NEED TO ENTER A NUMBER

LESS THAN 100 OR 'DK'.

HOWEVER YOU ENTERED:

<Question 6306>

PLEASE TAB 'OK' TO AMEND

If [Q6306 > Q6305 and Q6306 < 9998] otherwise continue at question 6307

Please check this number should not be more than <Question 6305>

Question 6307

Question only asked, if [Q6301 , 2]
1627L4

SHOW SCREEN

q632a0

How many cigarettes per week <?> you usually smoke?

INTERVIEWER: If respondent says 'Don't know', encourage them to give their best estimate

If [Q6301 , 2] otherwise continue at question 88005

[ANS5 < 701 and ANS5 > 0 or ANS5 = "0" or ANS5 = "00" or ANS5 = "000" or ANS5 = "0000" or ANS5 = If "DK" or ANS5 = "dk"] continue at question 88005

Question 8805

PLEASE NOTE YOU NEED TO ENTER A NUMBER

LESS THAN 700 OR 'DK'.

HOWEVER YOU ENTERED:

<Question 6307>

PLEASE TAB 'OK' TO AMEND

If [Q6307 = 9998] continue at question 6309

Question 6308

Question only asked, if [Q6307 < 0]
1631L4

SHOW SCREEN

q632e16

How many of these do you think are hand-rolled?

INTERVIEWER: If respondent says 'Don't know', encourage them to give their best estimate. You will not be able to type in a number larger than the previous question.

If [Q6307 < 0] otherwise continue at question 88006

[ANS6 < 701 and ANS6 > 0 or ANS6 = "0" or ANS6 = "00" or ANS6 = "000" or ANS6 = "0000" or ANS6 = If "DK" or ANS6 = "dk"] continue at question 88006

Question 8806

PLEASE NOTE YOU NEED TO ENTER A NUMBER

LESS THAN 700 OR 'DK'.

HOWEVER YOU ENTERED:

<Question 6308>

PLEASE TAB 'OK' TO AMEND

If [Q6308 > Q6307 and Q6308 < 9998] otherwise continue at question 6309

Please check this number should not be more than <Question 6307>

Question 6311

1645L1

SHOW SCREEN

q632b2

How soon after you wake up <?> you light up?

- 1 ☐ 1. Within 5 minutes
- 2 ☐ 2. 6 - 30 minutes
- 3 ☐ 3. 31 - 60 minutes
- 4 ☐ 4. More than 60 minutes
- 5 ☐ DK

Question 6312

Multiple answers allowed

1646L100

SHOW SCREEN - MULTI CODE

q632x4a

Has your GP spoken to you about smoking in the past year
(i.e. last 12 months)?

INTERVIEWER: PLEASE CODE ALL THAT APPLY

- 1 ☐ 1. Yes, he\she suggested that I go to a specialist stop smoking advisor or group
- 2 ☐ 2. Yes, he\she suggested that I see a nurse in the practice
- 3 ☐ 3. Yes, he\she offered me a prescription for Champix, Zyban, a nicotine patch, nicotine gum or another nicotine product
- 4 ☐ 4. Yes, he\she advised me to stop but did not offer anything
- 5 ☐ 5. Yes, he\she asked me about my smoking but did not advise me to stop smoking
- 6 ☐ 6. No, I have seen my GP in the last year but he\she has not spoken to me about smoking
- 7 ☐ 7. No, I have not seen my GP in the last year
- 98 ☐ DK\CR

Question 63303

Question only asked, if [Q6312 , 1 TO 3]
4441L3

SHOW SCREEN

NEWW53b:

Which of these best described what happened?

- 1 ☐ 1. My GP raised the topic of smoking, I said I was interested and then he or she offered a prescription or help from a stop-smoking advisor
- 2 ☐ 2. My GP raised the topic of smoking together with the offer of a prescription or help from a stop-smoking advisor
- 3 ☐ Neither of these
- 4 ☐ DK

Question 207

1305L4

SHOW SCREEN

Q632b7

How many serious attempts to stop smoking have you made in the last 12 months?

By serious attempt I mean you decided that you would try to make sure you never smoked again. Please include any attempt that you are currently making and please include any successful attempt made within the last year.

If [ANS9 = "0" or ANS9 = "00" or ANS9 = "000" or ANS9 = "0000" or ANS9 = "DK" or ANS9 = "dk"] continue at question 2071

[ANS9 < 151 and ANS9 > 0 or ANS9 = "0" or ANS9 = "00" or ANS9 = "000" or ANS9 = "0000" or ANS9 = If "DK" or ANS9 = "dk"] continue at question 88009

Question 8809

PLEASE NOTE YOU NEED TO ENTER A NUMBER LESS THAN 150 OR 'DK'.

HOWEVER YOU ENTERED:

<Question 207>

PLEASE TAB 'OK' TO AMEND

Question 2071

Open ended answer is written as a bitmap

Question only asked, if [Q101 , 4 and (ANS9 = "0" or ANS9 = "00" or ANS9 = "000" or ANS9 = "0000")]
4451L1

SHOW SCREEN

Q207a

You stopped smoking completely in the last year but also made no serious quit attempts in the past 12 months. Which of these best applies to you:

- 1 ☐ I actually stopped smoking completely more than a year ago
- 2 ☐ Since I was successful in stopping smoking, I did not consider it to be an attempt but rather a success
- 3 ☐ I have only stopped smoking temporarily and intend to return to smoking
- 4 ☐ I have stopped smoking completely and intend to remain a non-smoker but am not ruling out the occasional puff
- 5 ☐ I stopped smoking completely without seriously attempting to do so
- 6 ☐ Other
- 7 ☐ DK*

If [Q2071 , 1 , 6 , 7] go to end of questionnaire

Question 2072

Question only asked, if [Q2071 , 2 TO 5]

SHOW SCREEN

The next few questions relate to when you stopped smoking completely in the last 12 months. For these questions please consider that to have been your most recent serious quit attempt.

If [Q2071 , 2 TO 5] continue at question 208

If [Q207 > 0 and not Q207 , 9998] otherwise continue at question 2222

Question 1111

Question only asked, if [not Q207 , 9998]

The next few questions relate to the most recent serious quit attempt to stop smoking you made in the last 12 months ...

Question 208

1309L1

SHOW SCREEN

Q632b8

How long ago did your most recent serious quit attempt start?

By most recent, we mean the last time you tried to quit.

- 1 ☐ 1. In the last week
- 2 ☐ 2. More than a week and up to a month
- 3 ☐ 3. More than 1 month and up to 2 months
- 4 ☐ 4. More than 2 months and up to 3 months
- 5 ☐ 5. More than 3 months and up to 6 months
- 6 ☐ 6. More than 6 months and up to a year
- 7 ☐ DK\CR

Question 6315

1748L2

SHOW SCREEN

q632b9

How long did your most recent serious quit attempt last before you went back to smoking?

- 1 ☐ 1. Still not smoking
- 2 ☐ 2. Less than a day
- 3 ☐ 3. Less than a week
- 4 ☐ 4. More than 1 week and up to a month
- 5 ☐ 5. More than 1 month and up to 2 months
- 6 ☐ 6. More than 2 months and up to 3 months
- 7 ☐ 7. More than 3 months and up to 6 months
- 8 ☐ 8. More than 6 months and up to a year
- 98 ☐ DK\CR

Question 540

Multiple answers allowed
Open ended answer is written as a bitmap

1310L100

SHOW SCREEN - MULTI CHOICE

Q632e40

Which, if any, of the following did you try to help you stop smoking during the most recent serious quit attempt?

INTERVIEWER: PLEASE CODE ALL THAT APPLY

PROBE FULLY: Which others?

PLEASE WRITE IN OTHER ANSWERS CAREFULLY AND USE CAPITAL LETTERS

PLEASE SCROLL DOWN TO SEE FULL LIST OF RESPONSES

- 1 ☐ 1. Nicotine replacement product (eg. patches\gum\inhaler) without a prescription
- 2 ☐ 2. Nicotine replacement product on prescription or given to you by a health professional
- 3 ☐ 3. Zyban (bupropion)
- 4 ☐ 4. Champix (varenicline)
- 5 ☐ 5. Attended a Stop Smoking group
- 6 ☐ 6. Attended one or more Stop Smoking one-to-one counselling\advice\support session\s
- 7 ☐ 7. Phoned a Smoking Helpline
- 8 ☐ 8. A book or booklet
- 9 ☐ 9. Visited www.nhs.uk/smokefree website
- 10 ☐ 10. Visited a website other than Smokefree
- 15 ☐ 15. Used an application ('app') on a handheld computer (smartphone, tablet, PDA)
- 11 ☐ 11. Hypnotherapy
- 12 ☐ 12. Acupuncture
- 14 ☐ 14. Electronic cigarette
- 13 ☐ 13. Other
- 98 ☐ DK
- 97 ☐ N

Question 6316

Multiple answers allowed
Question only asked, if [Q540 , 1 TO 2 or Q541 , 1 TO 2]
1750L100

SHOW SCREEN - MULTI CHOICE

q632e69

Which, if any, of the following nicotine replacement products did you use for your most recent serious quit attempt? Please choose all that apply.

- 1 ☐ 1. Nicorette® Invisi 15 mg patch 16 hour
- 2 ☐ 2. Nicorette® Invisi 25 mg patch 16 hour
- 3 ☐ 3. Other 16 hour nicotine patch
- 4 ☐ 4. Nicotine patch 24 hour
- 5 ☐ 5. Nicotine gum
- 6 ☐ 6. Nicorette® Inhalator
- 7 ☐ 7. Nicorette® Microtab
- 8 ☐ 8. Nicorette® Nasal spray
- 9 ☐ 9. Nicotine lozenge
- 10 ☐ 10. Nicotine mouthspray
- 97 ☐ N
- 98 ☐ DK

Question 6317

Question only asked, if [ansQ6369 > 1]

1850L1

SHOW SCREEN

q632e70

You said that you used more than one nicotine replacement product for your most recent serious quit attempt. Did you....

- 1 ☐ 1. Try one product and then stop using this and try another (so that you only used one product at a time)
- 2 ☐ 2. Try using one product and then add the other product(s) if the first product was not enough
- 3 ☐ 3. Use more than one product at a time from the beginning of your quit attempt
- 4 ☐ DK

Question 6318

1851L1

SHOW SCREEN

q632c1

Did you cut down the amount you smoked before trying to stop completely at your most recent serious quit attempt?

- 1 ☐ 1. Cut down first
- 2 ☐ 2. Stopped without cutting down
- 3 ☐ DK\CR

Question 6319

1852L1

SHOW SCREEN

q632c2

Which one of the following applies to your most recent serious quit attempt?

- 1 ☐ 1. I planned the quit for later the same day or for a date in the future
- 2 ☐ 2. I started the quit attempt the moment I made the decision I was going to stop
- 3 ☐ DK

Question 331

Multiple answers allowed

Open ended answer is written as a bitmap

1410L100

SHOW SCREEN - MULTI CHOICE

Q632c3a

Which of the following do you think contributed to you making the most recent quit attempt?

INTERVIEWER: PLEASE CODE ALL THAT APPLY

PROBE FULLY: Which others?

PLEASE WRITE IN OTHER ANSWERS CAREFULLY AND USE CAPITAL LETTERS

PLEASE SCROLL DOWN TO SEE FULL LIST OF RESPONSES

- 1 ☐ 1. Advice from a GP\health professional
- 2 ☐ 2. TV advert for a nicotine replacement product
- 3 ☐ 3. Government TV\radio\press advert
- 4 ☐ 4. Hearing about a new stop smoking treatment
- 5 ☐ 5. A decision that smoking was too expensive
- 6 ☐ 6. Being faced with smoking restrictions
- 7 ☐ 7. I knew someone else who was stopping
- 8 ☐ 8. Seeing a health warning on a cigarette packet
- 9 ☐ 9. Being contacted by my local NHS Stop Smoking Services
- 10 ☐ 10. Health problems I had at the time
- 11 ☐ 11. A concern about future health problems
- 12 ☐ 12. Attending a local stop smoking activity or event

- 13 ☐ 13. Something said by family\friends\children
- 14 ☐ 14. A significant birthday
- 15 ☐ 15. Other
- 98 ☐ DK\CR

If [Q207 > 1] otherwise continue at question 3333

Question 4444

Question only asked, if [not Q207 , 9998]

The next few questions relate to the second most serious quit attempt to stop smoking you made in the last 12 months....

Question 6330

Question only asked, if [Q207 > 0 and Q207 < 151]

1853L1

SHOW SCREEN

q632c4

How long ago did your second most recent serious quit attempt start?

By second most recent, we mean the time BEFORE the last time you tried to quit.

- 1 ☐ 1. In the last week
- 2 ☐ 2. More than a week and up to a month
- 3 ☐ 3. More than 1 month and up to 2 months
- 4 ☐ 4. More than 2 months and up to 3 months
- 5 ☐ 5. More than 3 months and up to 6 months
- 6 ☐ 6. More than 6 months and up to a year
- 7 ☐ DK\CR

Question 6331

Question only asked, if [Q207 > 0 and Q207 < 151]

1854L1

SHOW SCREEN

q632c5

How long did your second most recent serious quit attempt last before you went back to smoking?

- 1 ☐ 1. Less than a day
- 2 ☐ 2. Less than a week
- 3 ☐ 3. More than 1 week and up to a month
- 4 ☐ 4. More than 1 month and up to 2 months
- 5 ☐ 5. More than 2 months and up to 3 months
- 6 ☐ 6. More than 3 months and up to 6 months
- 7 ☐ 7. More than 6 months and up to a year
- 8 ☐ DK\CR

Question 6332

Multiple answers allowed

Open ended answer is written as a bitmap

Question only asked, if [Q207 > 0 and Q207 < 151]

1855L100

SHOW SCREEN - MULTI CHOICE

Q632e41

Which, if any, of the following did you try to help you stop smoking during the second most recent serious quit attempt?

INTERVIEWER: PLEASE CODE ALL THAT APPLY

PROBE FULLY: Which others?

PLEASE WRITE IN OTHER ANSWERS CAREFULLY AND USE CAPITAL LETTERS

PLEASE SCROLL DOWN TO SEE FULL LIST OF RESPONSES

- 1 ☐ 1. Nicotine replacement product (eg. patches\gum\inhaler) without a prescription
- 2 ☐ 2. Nicotine replacement product on prescription or given to you by a health professional
- 3 ☐ 3. Zyban (bupropion)
- 4 ☐ 4. Champix (varenicline)
- 5 ☐ 5. Attended a Stop Smoking group
- 6 ☐ 6. Attended one or more Stop Smoking one-to-one counselling\advice\support session\s
- 7 ☐ 7. Phoned a Smoking Helpline
- 8 ☐ 8. A book or booklet
- 9 ☐ 9. Visited www.nhs.uk\smokefree website
- 10 ☐ 10. Visited a website other than Smokefree
- 15 ☐ 15. Used an application ('app') on a handheld computer (smartphone, tablet, PDA)
- 11 ☐ 11. Hypnotherapy
- 12 ☐ 12. Acupuncture
- 14 ☐ 14. Electronic cigarette
- 13 ☐ 13. Other
- 98 ☐ DK
- 97 ☐ N

Question 6335

Multiple answers allowed

Open ended answer is written as a bitmap

Question only asked, if [Q207 > 0 and Q207 < 151]

1957L100

SHOW SCREEN - MULTI CHOICE

Q632c9a

Which of the following do you think contributed to you making the second most recent quit attempt?

INTERVIEWER: PLEASE CODE ALL THAT APPLY

PROBE FULLY: Which others?

PLEASE WRITE IN OTHER ANSWERS CAREFULLY AND USE CAPITAL LETTERS

PLEASE SCROLL DOWN TO SEE FULL LIST OF RESPONSES

- 1 ☐ 1. Advice from a GP\health professional
- 2 ☐ 2. TV advert for a nicotine replacement product
- 3 ☐ 3. Government TV\radio\press advert
- 4 ☐ 4. Hearing about a new stop smoking treatment
- 5 ☐ 5. A decision that smoking was too expensive
- 6 ☐ 6. Being faced with smoking restrictions
- 7 ☐ 7. I knew someone else who was stopping
- 8 ☐ 8. Seeing a health warning on a cigarette packet
- 9 ☐ 9. Being contacted by my local NHS Stop Smoking Services
- 10 ☐ 10. Health problems I had at the time
- 11 ☐ 11. A concern about future health problems
- 12 ☐ 12. Attending a local stop smoking activity or event
- 13 ☐ 13. Something said by family\friends\children
- 14 ☐ 14. A significant birthday
- 15 ☐ 15. Other
- 98 ☐ DK\CR

If [Q207 > 2] otherwise continue at question 76501

Question 5555

Question only asked, if [not Q207 , 9998]

The next few questions relate to the third most recent serious quit attempt to stop smoking you made in the last 12 months....

Question 6336

Question only asked, if [Q207 > 1 and Q207 < 151]

2057L1

SHOW SCREEN

q632c0

How long ago did your third most recent serious quit attempt start?

- 1 ☐ 1. In the last week
- 2 ☐ 2. More than a week and up to a month
- 3 ☐ 3. More than 1 month and up to 2 months
- 4 ☐ 4. More than 2 months and up to 3 months
- 5 ☐ 5. More than 3 months and up to 6 months
- 6 ☐ 6. More than 6 months and up to a year
- 7 ☐ DK\CR

Question 6337

Question only asked, if [Q207 > 1 and Q207 < 151]

2058L1

SHOW SCREEN

q632d1

How long did your third most recent serious quit attempt last before you went back to smoking?

- 1 ☐ 1. Less than a day
- 2 ☐ 2. Less than a week
- 3 ☐ 3. More than 1 week and up to a month
- 4 ☐ 4. More than 1 month and up to 2 months
- 5 ☐ 5. More than 2 months and up to 3 months
- 6 ☐ 6. More than 3 months and up to 6 months

- 7 ☐ 7. More than 6 months and up to a year
 8 ☐ DK\CR

Question 6338

Multiple answers allowed

Open ended answer is written as a bitmap

Question only asked, if [Q207 > 1 and Q207 < 151]

2059L100

SHOW SCREEN - MULTI CHOICE

Q632e42

Which, if any, of the following did you try to help you stop smoking during the third most recent serious quit attempt?

INTERVIEWER: PLEASE CODE ALL THAT APPLY

PROBE FULLY: Which others?

PLEASE WRITE IN OTHER ANSWERS CAREFULLY AND USE CAPITAL LETTERS

PLEASE SCROLL DOWN TO SEE FULL LIST OF RESPONSES

- 1 ☐ 1. Nicotine replacement product (eg. patches\gum\inhaler) without a prescription
- 2 ☐ 2. Nicotine replacement product on prescription or given to you by a health professional
- 3 ☐ 3. Zyban (bupropion)
- 4 ☐ 4. Champix (varenicline)
- 5 ☐ 5. Attended a Stop Smoking group
- 6 ☐ 6. Attended one or more Stop Smoking one-to-one counselling\advice\support session\s
- 7 ☐ 7. Phoned a Smoking Helpline
- 8 ☐ 8. A book or booklet
- 9 ☐ 9. Visited www.nhs.uk/smokefree website
- 10 ☐ 10. Visited a website other than Smokefree
- 15 ☐ 15. Used an application ('app') on a handheld computer (smartphone, tablet, PDA)
- 11 ☐ 11. Hypnotherapy
- 12 ☐ 12. Acupuncture
- 14 ☐ 14. Electronic cigarette
- 13 ☐ 13. Other
- 98 ☐ DK

Question 6341

Multiple answers allowed

Open ended answer is written as a bitmap

Question only asked, if [Q207 > 1 and Q207 < 151]

2161L100

SHOW SCREEN - MULTI CHOICE

Q632d5a

Which of the following do you think contributed to you making the third most recent quit attempt?

INTERVIEWER: PLEASE CODE ALL THAT APPLY

PROBE FULLY: Which others?

PLEASE WRITE IN OTHER ANSWERS CAREFULLY AND USE CAPITAL LETTERS

PLEASE SCROLL DOWN TO SEE FULL LIST OF RESPONSES

- 1 ☐ 1. Advice from a GP\health professional
- 2 ☐ 2. TV advert for a nicotine replacement product
- 3 ☐ 3. Government TV\radio\press advert
- 4 ☐ 4. Hearing about a new stop smoking treatment
- 5 ☐ 5. A decision that smoking was too expensive
- 6 ☐ 6. Being faced with smoking restrictions
- 7 ☐ 7. I knew someone else who was stopping
- 8 ☐ 8. Seeing a health warning on a cigarette packet
- 9 ☐ 9. Being contacted by my local NHS Stop Smoking Services
- 10 ☐ 10. Health problems I had at the time
- 11 ☐ 11. A concern about future health problems

- 12 ☐ 12. Attending a local stop smoking activity or event
- 13 ☐ 13. Something said by family \friends\children
- 14 ☐ 14. A significant birthday
- 15 ☐ 15. Other
- 98 ☐ DK\CR

Question 6501

Multiple answers allowed

Open ended answer is written as a bitmap

Question only asked, if [Q101 , 1 TO 4]

4120L100

SHOW SCREEN

ASH1

In the last 6 months, have you bought any cigarettes or hand rolled tobacco from any of the following?

INTERVIEWER: PLEASE CODE ALL THAT APPLY PROBE FULLY: Which others?

PLEASE WRITE IN OTHER ANSWERS CAREFULLY AND USE CAPITAL LETTERS

PLEASE SCROLL DOWN TO SEE FULL LIST OF RESPONSES

- 1 ☐ 1. Newsagent\Off licence\Corner shop
- 14 ☐ 14. Newsagent\Off licence\Corner shop - "under the counter"
- 2 ☐ 2. Petrol garage shop
- 3 ☐ 3. Supermarket
- 4 ☐ 4. Cash and Carry
- 5 ☐ 5. Internet
- 6 ☐ 6. Pub (behind the bar)
- 7 ☐ 7. Pub (vending machine)
- 8 ☐ 8. selling cigarettes cheap)
- 9 ☐ 9. People who sell cheap cigarettes on the street
- 10 ☐ 10. a ready supply of cheap cigarettes
- 11 ☐ 11. Buy them cheap from friends
- 12 ☐ 12. them back with me
- 13 ☐ 13. Other
- 97 ☐ 97. Have not bought any in the last 6 months
- 98 ☐ 98. DK

End of questionnaire