

# 5.4 Measures to assess the effectiveness of restrictions on tobacco marketing communications

## Introduction

The WHO FCTC proposes a comprehensive ban on tobacco advertising, promotion, and sponsorship, in recognition that it would reduce consumption of tobacco products (Figure 5.12). This section will explain how to go about measuring the effectiveness of restrictions on tobacco marketing communications, such as advertising bans or limitations on the use of specific media. First, terms are defined and explanations given on how promotional activity fits into the wider marketing strategy of tobacco corporations. The importance of restrictions on tobacco promotion is discussed, as well as the need to measure their effectiveness. Different ways of measuring effectiveness are looked at, with an argument that consumer surveys are one of the most useful. Finally, specific measures that can be used are offered.

## Defining terms: tobacco promotion and marketing

Tobacco promotion covers all the communication efforts tobacco corporations use to encourage consumption of their products. These include mass media advertising (e.g. television, posters, and in the press), sponsorship of sporting and cultural events, point-

of-sale promotion, merchandising and give-aways, and public relations. Table 5.23 provides an illustrative list.

The communication efforts, or more accurately *marketing communications*, outlined in Table 5.23, aim to encourage consumption of tobacco products by relaying a variety of messages to customers. As well as communicating basic product information and reminding the world about its product, marketing communications are used to reassure current customers that they have made the right decision, encourage new customers to try their product, and steer customers away from competitors. In essence the goal is to tell the customer or potential customer how the offering fulfils their needs.

A well-established business literature about the value of *integrated marketing communications* (IMC) (Schultz & Kitchen, 2000) argues for combining mass media and other *marketing communications* in a marketing communications mix. IMC holds that all company communications with their customers, through whatever channels, should be coordinated and coherent to articulate a completely unified message. In this way, the whole can become greater than the sum of the parts. For example, this comment from a tobacco industry advertising agent

shows how merchandising, packaging, and advertising are pressed into joint service:

*“What I would add is that there is a definite sub-culture among younger roll-your-own smokers, and I believe their desire to display their exclusivity could be supported by provision of unusually designed “badges” such as (transparent?) Raw lighters and rolling machines. This will enable them to differentiate themselves from uncool, older GV [Golden Virginia] smokers, who I suspect would not be particularly motivated to buy the product by either the advertising or the packaging”* (Collet Dickenson Pierce, 1999).

For many fast moving consumer goods (that have a quick turnover and relatively low cost), the ultimate aim of integrated marketing communications is to build evocative brands; something the tobacco multinationals do well, and is crucial for their financial success. Brands and their carefully crafted imagery are the principal means of meeting the psychosocial needs of one of their most important markets: young people. Ultimately, *“if a brand of cigarettes does not convey much in the way of image values, there may well be little reason for a young smoker to persist with or adopt the brand”* (Rothmans Marketing

1. Parties recognize that a comprehensive ban on advertising, promotion and sponsorship would reduce the consumption of tobacco products.
2. Each Party shall, in accordance with its constitution or constitutional principles, undertake a comprehensive ban of all tobacco advertising, promotion and sponsorship. This shall include, subject to the legal environment and technical means available to that Party, a comprehensive ban on cross-border advertising, promotion and sponsorship originating from its territory. In this respect, within the period of five years after entry into force of this Convention for that Party, each Party shall undertake appropriate legislative, executive, administrative and/or other measures and report accordingly in conformity with Article 21.
3. A Party that is not in a position to undertake a comprehensive ban due to its constitution or constitutional principles shall apply restrictions on all tobacco advertising, promotion and sponsorship. This shall include, subject to the legal environment and technical means available to that Party, restrictions or a comprehensive ban on advertising, promotion and sponsorship originating from its territory with cross-border effects. In this respect, each Party shall undertake appropriate legislative, executive, administrative and/or other measures and report accordingly in conformity with Article 21.
4. As a minimum, and in accordance with its constitution or constitutional principles, each Party shall:
  - (a) prohibit all forms of tobacco advertising, promotion and sponsorship that promote a tobacco product by any means that are false, misleading or deceptive or likely to create an erroneous impression about its characteristics, health effects, hazards or emissions;
  - (b) require that health or other appropriate warnings or messages accompany all tobacco advertising and, as appropriate, promotion and sponsorship;
  - (c) restrict the use of direct or indirect incentives that encourage the purchase of tobacco products by the public;
  - (d) require, if it does not have a comprehensive ban, the disclosure to relevant governmental authorities of expenditures by the tobacco industry on advertising, promotion and sponsorship not yet prohibited. Those authorities may decide to make those figures available, subject to national law, to the public and to the Conference of the Parties, pursuant to Article 21;
  - (e) undertake a comprehensive ban or, in the case of a Party that is not in a position to undertake a comprehensive ban due to its constitution or constitutional principles, restrict tobacco advertising, promotion and sponsorship on radio, television, print media and, as appropriate, other media, such as the internet, within a period of five years; and
  - (f) prohibit, or in the case of a Party that is not in a position to prohibit due to its constitution or constitutional principles restrict, tobacco sponsorship of international events, activities and/or participants therein.
5. Parties are encouraged to implement measures beyond the obligations set out in paragraph 4.
6. Parties shall cooperate in the development of technologies and other means necessary to facilitate the elimination of cross-border advertising.
7. Parties which have a ban on certain forms of tobacco advertising, promotion and sponsorship have the sovereign right to ban those forms of cross-border tobacco advertising, promotion and sponsorship entering their territory and to impose equal penalties as those applicable to domestic advertising, promotion and sponsorship originating from their territory in accordance with their national law. This paragraph does not endorse or approve of any particular penalty.
8. Parties shall consider the elaboration of a protocol setting out appropriate measures that require international collaboration for a comprehensive ban on cross-border advertising, promotion and sponsorship.

WHO (2003)

**Figure 5.12 WHO FCTC Article 13: *Tobacco Advertising, Promotion and Sponsorship***

**Advertising**

Broadcast media (TV, radio, cinema)  
Outdoor (billboards, posters outside stores)  
Press

**Sponsorship of Sports and the Arts**

**Point-of-Sale**

Promotional material in shops (branded gantries, clocks, signage, staff clothing)

**Coupon Schemes**

Coupons included in packs of cigarettes that can be exchanged for free gifts

**Merchandising**

Low cost items (pens, lighters or t-shirts), competitions, free cigarettes

**Special Price Offers**

Short-term low price offers advertised in-store, on pack flashes, or in other media

**Promotional Mail**

Marketing communications sent straight to customers

**Brand Stretching**

Non-tobacco products with tobacco branding (Marlboro Classic clothes)

**Pack designs to communicate brand image and to add value**

**Internet sites**

Websites promoting tobacco companies, cigarette brands, or smoking

**Product Placement**

Paid for placement of cigarette brands in films or television

**Table 5.23 Examples of Tobacco Marketing Communications**

Services, 1998). The challenge therefore is to “cement the brand into the repertoire of the experimental smoker” (Collet Dickenson Pierce, 1996).

It has been found that younger smokers give more weight to the imagery of cigarettes, and pay more attention and are receptive to fashionable brands and the latest designs (Hastings & MacFadyen, 2000). Well-known brands, most notably Marlboro

lights, exploit these emotional needs and insecurities: “the success of Marlboro Lights derives from its being...the aspirational lifestyle brand... “cool”...the Diet Coke of cigarettes” (The Leading Edge Consultancy, 1997).

The power of brand imagery is not only used on the young. In the low tar sector, branding, names, and liveries are used to create reassuring images and asso-

ciations. For example, a low tar product “is supported by the brand’s imagery,” which has a “high association with ‘health conscious people’” (Marketing Trends, 1995). Also, the tobacco industry has used images of happiness, physical well-being, harmony with nature, and a self-image of intelligence to appeal to the older, “concerned” smokers to discourage them from quitting (Pollay, 2000; Pollay & Dewhirst, 2002).

Evocative branding, created through research to complement consumers' lifestyles and aspirations, is spread by integrated marketing communications. This communication effort dovetails with the company's wider marketing effort, encompassing product design, pricing, and distribution, to ensure optimal consumer satisfaction.

The product's marketing function is reinforced by its prominence in the smoker's life: "*Smokers buy cigarettes frequently. They carry their brand around with them and see other brands constantly. The product is a prime means of communicating a change*" (Collet Dickenson Pierce, 1998).

New product development ideas ensure that the needs of consumers are met and that appropriate pharmacological and aspirational benefits are offered. The new smoker is assisted on the passage from experimenter to regular smoker by lower pH levels in cigarettes, which lowers the rate of absorption of nicotine, thus minimising the initial side-effects of smoking, such as dizziness and nausea (Claude, 1973). Tobacco marketers have also developed "product line extensions" specifically in response to increasing health propaganda. For virtually every brand there is now a "light" or "low" alternative, providing the worried smoker with an excuse or rationalisation to continue smoking. Other development ideas include an Espresso cigarette to fit the new "café culture" and to provide "quick hit (caffeine/nicotine) with young, streetwise

imagery" (e.g. "a lad's cigarette, complete with scantily clad women on the cigarette paper!"), and "nationalistic (but not jingoistic)" Scottish and Welsh cigarettes to exploit devolution (Hastings & MacFadyen, 2000). These ideas never reached the street, but they do illustrate how the product is manipulated to create synergy with the overall marketing effort.

Pricing strategies are also important to tobacco companies, and the relationship between quality, brand image, and price is particularly so, as it feeds into fundamental decisions about segmentation and targeting. Thus, for the starter segment, premium pricing is appropriate. While adolescents tend to be more price sensitive than adults, they attribute a greater premium to the image attached to the more expensive product, if they are visible and socially important. Therefore the pricing strategy should clearly demonstrate the high quality and style of the brand, if the product is to meet the adolescent's needs for image and social status (DiFranza *et al.*, 1991; DiFranza, 1995; Barnard & Forsyth, 1996; Pollay *et al.*, 1996).

For established smokers, their addiction and maturity makes the price-quality relationship less of an issue, making them more willing to trade down. In response, the industry runs coupon schemes and sales promotions to reduce the perceived price of smoking. These types of pricing strategies tie the established smoker to one particular brand and reward them for their loyalty.

For the tobacco industry, the distribution system helps build the brand personality and target the specific need of each segment. Despite bans on the sale of cigarettes to minors, distribution tactics still play a big role in targeting them. Wide distribution ensures cigarettes become omnipresent and a cultural norm, encouraging adolescents to overestimate the extent, and underestimate the social disapproval, of smoking (Davis, 1991; Wakefield *et al.*, 1992; Evans *et al.*, 1995). More prosaically, marketers can place their products in those outlets where it is easier for adolescents to buy cigarettes and many of them do so successfully. In the UK, outlets such as newsagents, tobacconists, and sweetshops are the most popular source for sales to young smokers (Boreham & Shaw, 2001; Bates *et al.*, 2005), making them a good option for under-age distribution.

For the established smoker, wide distribution also helps create an environment of normalcy and reassurance. Furthermore, the distribution network is so complete that the smoker can rest assured that cigarettes will always be readily available.

Thus, the industry's use of integrated marketing communications is nested in their wider marketing effort involving a consumer oriented strategy to get "*the right product, at the right time, in the right place, with the right price*" (Cannon, 1992).

The issues of product design and pricing, and how these can be

measured, are discussed in Sections 5.3 and 5.1, respectively. This section is concerned with examining marketing communications; the evidence base that shows that these strategies do influence smoker's behaviour and that they need to be restricted.

### **Why restrictions on tobacco marketing communications matter**

To help understand the potential effect of removing or restricting tobacco marketing communications, it is helpful to first look at a selection of studies that have examined the influence exerted by tobacco marketing, and the approaches and measures that have been used in these studies. They can be helpful, not only in guiding expectations about attributes that will change as a result of restrictions, but also in identifying which measures are important to collect.

#### *Modelling aggregate demand:*

One of the first and most influential studies into the effects of tobacco promotion on consumption was conducted in the UK (McGuinness & Cowling, 1975). It modelled the aggregate demand for cigarettes in terms of price, income, and advertising. The advertising measure was an estimate of the number of messages received by a consumer rather than expenditure. Their findings suggested that advertising does have a significant effect on cigarette sales, but that

publicity of adverse health effects of smoking had reduced the sales effect of cigarette advertising.

#### *Evaluation of advertising bans:*

Evidence from studies evaluating the effects of advertising bans also show that marketing communications have a significant effect on consumption. The Smee Report, which analysed Norway's 1975 Tobacco Act, concluded that the Act decreased smoking demand between 9% and 16% (Economics and Operational Research Division of the Department of Health in England, Smee *et al.*, 1992 - Economics and Operational... England). Similarly a study of the effects of the 1971 Finland Tobacco Act, which analysed data from 1960 to 1987, concluded that the advertising ban produced a long-term reduction of 6.7% in cigarette smoking (Pekurinen, 1989). Measures of per capita annual consumption of cigarettes and tobacco were analysed by extent of advertising bans across 22 countries (Saffer & Chaloupka, 2000). Minimal effect was found from limited bans in reducing tobacco use, but clear effect from comprehensive bans. (See the following section on "Advertising bans of specific media" for definitions of the types of bans.)

#### *Evaluation of individual campaigns:*

Evaluation of individual campaigns reveals how the tobacco industry has targeted specific

groups. For example, an evaluation of a Camel cigarette campaign in the early 1990s revealed that in a short period of time, it had made a huge impact upon children's smoking behaviour (DiFranza *et al.*, 1991). The campaign featured a cartoon drawn Camel, known as Joe the Camel, which was suspected of having particular appeal to children. The study asked about brand preference and compared it with data from seven surveys conducted prior to the launch of the Camel campaign. In the three years following the start of the campaign there was an increase from 0.5% to 32.8% in the proportion of young smokers (aged up to 18) who named Camel as their preferred brand. The study measured awareness of the campaign and identification of product type and brand name by showing an advert masking all clues (except Old Joe) to the product and brand being advertised. The research found that children were more aware of the campaign and more able to identify the product type and brand name from the logo than adults. A campaign "appeal score" was compiled by asking subjects to rate six unmasked Old Joe adverts across four items: cool, stupid, interesting, or boring. They were asked if they thought Old Joe was "cool" and if they would like to be "friends" with him. Positive responses to each item were scored 1 and negative responses coded 0 and the appeal score was the arithmetic sum of these. Children were found to be more

likely than adults to find the campaign appealing.

#### *Brand awareness and appreciation:*

Campaigns are also linked with increases in brand awareness and appreciation. Qualitative work was conducted which found that children, as young as six years old, were aware of cigarette advertising, and that young primary school children had learned the brand imagery or personality of leading cigarette brands from advertisements (Aitken *et al.*, 1985). A survey in England showed that 17% of 9-10 year olds and 23% of 12-13 year olds were able to name a favourite cigarette advertisement (Charlton, 1986). The brands named most frequently were also those most heavily advertised in the area at the time. In addition, it was found that the children who named favourite advertisements were also more likely to agree with some positive statements about smoking and the image of smokers. It concluded that children receive positive messages about smoking behaviour from advertising, which may reinforce their decision to start smoking during experimentation. Thus, if tobacco advertising is banned, the expectation is that these positive messages will lessen or be eliminated.

#### *Brand choice:*

Studies have also examined brand choice in relation to tobacco advertising. Young smokers tend

to be particularly attracted to the most heavily advertised products, and it is these brands that dominate under-age sales. For example, the three most heavily promoted brands in the USA in 1993 (Camel, Marlboro, and Newport), were the three most likely to be purchased by adolescents (Centers for Disease Control and Prevention, 1994c). Similar patterns of preference for heavily advertised brands have also been observed amongst UK adolescents (Barton, 1998), and prolonged advertising makes brands seem popular (Sutherland & Galloway, 1981).

Although the majority of studies have examined the impact of mass media advertising on smoking, many other forms of marketing communication have also been studied (see Table 5.24). It is important to keep in mind the discussion about integrated marketing communications at this point, as none of these communication efforts are intended to work in isolation. Indeed the final study listed in Table 5.24 underlines this point by demonstrating a *cumulative* impact: the more forms of marketing communications that young people are aware of, the more likely they are to smoke.

#### *Longitudinal designs:*

The research discussed thus far has provided convincing evidence that there is a relationship between tobacco marketing communications and smoking behaviour. However, it has not established

cause and effect; longitudinal designs are needed to do this. A longitudinal study was undertaken to measure the predisposing effects of cigarette advertising on children's intentions to smoke when they were older (Aitken *et al.*, 1991). Two interviews were conducted among children aged 11-14 years: those who expressed a stronger intention to smoke during the second interview rather than the first, were more likely to have liked cigarette advertising at baseline. This demonstrates that nonsmokers, who felt that they may smoke when they were older, were paying more attention to cigarette advertising than other nonsmokers.

An important meta-analysis of longitudinal surveys has recently been published by the Cochrane Library (Lovato *et al.*, 2003). The authors asked the question: "*is prior exposure to tobacco industry advertising and promotion associated with future smoking among adolescents?*". They analysed the outcome of nine longitudinal studies, including the study mentioned above. All nine studies showed "a positive, consistent, and specific relationship" between exposure to tobacco advertising and influence upon adolescents to smoke cigarettes. The authors concluded:

*"Longitudinal studies suggest that exposure to tobacco advertising and promotion is associated with the likelihood that adolescents will start to smoke. Based on the strength of this association, the consistency of findings across numerous observa-*

### Sponsorship

- Exposure to a cigarette sponsored sports advertisement reinforced existing smoking behaviour, and for non-smokers created favourable attitudes towards smoking, increased awareness, and liking of brands ( Hoek *et al.*, 1993)
- Children show a higher awareness of the sponsoring brand, and link the exposure to brand recall and understanding of brand imagery (Ledwith, 1984; Aitken *et al.*, 1986; Piepe *et al.*, 1986)
- Children's preference for motor racing is a significant independent variable in move to regular smoking (Charlton *et al.*, 1997)
- The statement "smoking can't be all that dangerous, or the Government would ban sports sponsorship" was put to over 4000 11-16 yr olds; substantially more smokers than nonsmokers agreed with it (Bates, 1999)

### Merchandising

- Items such as branded lighters, t-shirts, baseball caps, and badges frequently reach adolescents at the point-of-sale, special events, or through competitions (Coeytaux *et al.*, 1995; Gilpin *et al.*, 1997; Pierce *et al.*, 1999)
- There is a significant relationship between experience of tobacco promotions and susceptibility to tobacco use (Altman *et al.*, 1996; Gilpin *et al.*, 1997; Feighery *et al.*, 1998)
- There is a relationship between the numbers of promotional items owned and a higher likelihood of smoking (Sargent *et al.*, 2000)
- There are relationships between smoking initiation rates and levels of promotional expenditure, and owning/using tobacco promotional items and the onset of smoking (Bauer & Johnson, 1999; Redmond, 1999)

### Brand-Stretching

- For example, the endorsement of holidays, cafés and music; items that are then sold rather than given away (Centre for Tobacco Control Research, 2001)
- Initial research focussed mainly on advertising for such products, and shows that this is consistently seen as advertising for the sponsoring tobacco brand rather than the product (Aitken *et al.*, 1985; Centre for Tobacco Control Research, 2001)
- The awareness of brand stretching by 15 year olds is independently associated with being a smoker (MacFadyen *et al.*, 2001)

### Packaging

- Tobacco packaging both reinforces brand imagery and reduces the impact of health warnings (Beede & Lawson, 1992; Carr-Greg & Gray, 1993; Goldberg *et al.*, 1995; Rootman & Flay, 1995)
- When fewer brand image cues were on the packaging, adolescents were able to recall more accurately non-image health information (Beede & Lawson, 1992)
- Plain packaging limits the ease with which consumers associate particular images with cigarette brands and significantly influences smoking behaviour (Goldberg *et al.*, 1995)

### Point-of-Sale (POS)

- Cigarette packets were displayed in such a way at the POS as to act like advertising (DiFranza *et al.*, 1999)
- Young adolescents who reported seeing tobacco advertising in stores were 38% more likely to experiment with smoking, and the advertising was found to enhance brand imagery (Schooler *et al.*, 1996; Donovan *et al.*, 2002)
- The more youth-orientated ads were displayed outside shops, the more often children tried to buy cigarettes (Voorhees *et al.*, 1998)
- There are greater levels of POS advertising in areas where there is likely to be a high prevalence of smoking (e.g. low-income / ethnic minority areas); young people are unduly exposed to them (Woodruff *et al.*, 1995; Ruel *et al.*, 2001; Laws *et al.*, 2002)

Table 5.24 The Influence of Marketing Communications on Smoking Behaviour

**Product Placement**

- The paid for placement of cigarette products in films and on TV is a controversial, but documented, marketing communications tactic. Strong evidence links this with adolescent smoking (Hart, 1996; Chapman & Davis 1997; Dalton *et al.*, 2003)

**Loyalty Schemes**

- There is significantly greater participation in low-income areas, and coupons may offset the effect of price increases (Centre for Social Marketing, 1995)
- Loyalty schemes involvement among 15 year olds is independently associated with smoking (MacFadyen *et al.*, 2001)

**Free Samples**

- A systematic search of tobacco industry documents confirms free samples as a popular strategy (Sepe *et al.*, 2002)
- Receipt of free samples by young people independently associated with susceptibility to smoke (Altman *et al.*, 1996)

**Internet**

- Tobacco manufacturers have their own websites and sponsor further sites unrelated to tobacco. Also pro-tobacco sites (not related to industry) include chat rooms/message boards and celebrities/attractive role models smoking, which may appeal to the young (Center for Media Education, 1997; Center for Media Education, 1998; Hong & Cody, 2002)

**Marketing Communications**

- Young people are aware of *all* forms of tobacco marketing communications; over half of all smokers had participated in some form of promotion; and the greater the number of tobacco marketing techniques a young person was aware of, the more likely they were to be a smoker (MacFadyen *et al.*, 2001)

**Table 5.24 The Influence of Marketing Communications on Smoking Behaviour**

*tional studies, temporality of exposure and smoking behaviours observed, as well as the theoretical plausibility regarding the impact of advertising, we conclude that tobacco advertising and promotion increases the likelihood that adolescents will start to smoke. From a policy perspective, attempts to eliminate tobacco advertising and promotion should be supported."*

A useful codicil could be added to the authors' final sentence: that there is also a need to devise

robust methodologies to monitor the effectiveness of any such prohibitions. To a large extent, the studies mentioned above have concentrated on measuring the influence of advertising. When measuring the effects and effectiveness of tobacco marketing restrictions/bans it is important to consider all potential forms of remaining tobacco marketing, and thereby monitor whether or not the tobacco industry diverts their marketing activities to less restricted media.

**Alternative methodologies**

In discussing the evidence base, it is apparent that various approaches and measures have been used to examine the effects of tobacco promotion. These same approaches are relevant and provide guidance as studies are designed to assess the effects and effectiveness of restrictions on tobacco marketing communications. Below, the two main approaches (econometric studies and consumer surveys) for examining the effects and effectiveness of tobacco marketing

restrictions are discussed. In addition, complementary approaches are addressed, including marketing surveillance and internal document analysis that can help to contextualise, interpret, and support results that emerge from consumer surveys and econometric analysis.

#### *Econometric studies:*

One approach is to use econometric<sup>1</sup> studies that model changes in tobacco consumption with fluctuations in tobacco advertising expenditures. There are two main types of econometric studies: comparative studies of countries with different levels of controls on advertising (cross-country studies); and studies which model the effect of year-to-year fluctuations in advertising expenditure on consumption within one particular country (time-series studies).

Prior econometric studies of tobacco consumption have used one of three alternative empirical measures of advertising: national aggregate expenditure data, cross-sectional measures of advertising, and advertising bans (Saffer & Chaloupka, 2000).

#### *National aggregate expenditure data:*

Annual national advertising expenditures are the yearly total of all cigarette advertising expen-

ditures, for all advertisers, in all media, for all geographic market areas. However, the high level of aggregation of such data results in it having very little variation, which leaves little to correlate with consumption. It is therefore unlikely that any effect of advertising will be found from use of this type of data.

#### *Cross-sectional data:*

The types of cross-sectional data can vary, but would typically be local level (e.g. Metropolitan Statistical Area (MSA)) and for periods of less than a year. This type of data can have greater variation than national level data, as the cost of advertising, the mix of target markets, and relative size varies across local areas. Monthly or quarterly local level data would include a relatively larger variation in advertising levels and in consumption data, and be more likely to find a positive relationship between advertising and consumption.

However, cross-sectional studies are rare as the data are expensive and difficult to assemble. A report on 21 prior empirical studies, three of which were cross-sectional, found that in each of the three cross-sectional studies, a significant positive effect of advertising was observed (Saffer & Chaloupka, 2000).

#### *Advertising bans in specific media:*

Tobacco advertisers use a number of media, and while each has particular advantages and disadvantages, a partial advertising ban will likely result in tobacco advertisers substituting a banned media with a form of media that is not banned. A partial ban, therefore, will not necessarily imply a reduction in total expenditure on tobacco advertising. For example, in the USA advertising expenditure fell subsequent to the 1971 TV ban, but rose quickly thereafter. Three studies of advertising bans that used pooled international data were reported (Saffer & Chaloupka, 2000). Two of these studies showed no effect of a ban, while one showed that advertising bans had no effect on consumption in the period prior to 1973, but thereafter, cigarette advertising bans and warning labels had a significant negative effect on consumption. Studies that use advertising bans as the measure of advertising must therefore include bans which are sufficiently comprehensive to ensure that the industry cannot compensate for lost media by increasing advertising or other marketing expenditures. Changes in the number of countries having enacted more comprehensive tobacco advertising bans since the late 1980s provided the

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<sup>1</sup>Application of mathematical and statistical techniques to economics in the study of problems, the analysis of data, and the development and testing of theories and models.

opportunity to re-examine the effects of advertising bans on tobacco consumption (Saffer & Chaloupka, 2000). Comparable economic and social data were available from 1960 for the 22 Organisation for Economic Cooperation and Development (OECD) countries studied. Four dependent variables were used in the regressions: two measures of per capita annual consumption of cigarettes, and two measures of per capita consumption of tobacco by weight. The data came from Health New Zealand and the United States Department of Agriculture. Advertising ban variables were created from data on television, radio, print, outdoor, point-of-purchase, and movie advertising, as well as sponsorship bans. These were converted into a set of three dummy variables: "Weak Ban" was set to equal one if there were zero, one, or two bans in effect; "Limited Ban" was set to equal one if there were three or four media banned; and "Comprehensive Ban" was set to equal one if there were five, six, or seven media banned. The analysis allowed assessment of the effect of limited and comprehensive bans, indicating minimal effect from limited bans in reducing tobacco use and clear effect on consumption from comprehensive bans (Saffer & Chaloupka, 2000).

Econometric studies of advertising and consumption are complicated and have produced mixed results. Part of the difficulty lies in the complexity of the procedure; models must account

for a large number of other social, political, and economic factors, which may have a confounding effect on consumption patterns. Availability and completeness of data can also be problematic. Independent researchers, in the UK for example, have had to work within the limitations of incomplete advertising data released by the tobacco industry. The data provides coverage of broadcast media and the press, but omits billboard advertising and sponsorship. Studies in the USA, however, benefit from comprehensive data on advertising expenditure which is freely available to independent researchers, albeit in aggregated form. In the absence of suitable data for advertising, dummy variables can be used as proxies, like the dummy variables for strength of ban discussed above.

The inability of econometric studies to examine all the forms of marketing communication used by the tobacco industry, such as loyalty schemes or point-of-sale displays, was examined (Chapman, 1989). In addition, there are two further drawbacks with econometric studies: they only examine the effects of advertising on overall sales, ignoring other important influences on smoking-related cognition and beliefs; and they usually only provide aggregated, population level data; in most cases they are not able to examine effects on sub-groups (e.g. young people, women, or those on low income), some of whom may be particularly vulnerable.

### *Consumer surveys:*

Another approach to examine the effects of tobacco promotion is through consumer surveys, which can overcome many of the problems associated with econometric studies. Consumer surveys can be appropriately timed to collect measures prior to the introduction of marketing restrictions and at a number of subsequent time points. At least one baseline measure is required prior to policy introduction, against which future changes can be gauged. The number and timing of post measures will depend on the timing of restrictions being posed and on the rate of change witnessed.

Consumer surveys allow social scientists to develop and test multiple hypotheses about tobacco marketing communications, the policies designed to restrict them, and how they may be working. In this way, specific sub-groups and a range of variables can be studied. Whereas econometric studies tend to rely on aggregate data, consumer surveys enable hypotheses about marketing communications to be tested at a more individual/disaggregated level, taking into account influences of individual characteristics.

This thinking can be built into a conceptual model, as with The International Tobacco Control Four Country Study (ITC) (Fong *et al.*, 2006a), where policies are characterised as potentially affecting individuals along a variety of psychosocial and behavioural variables, of which

there are two classes: policy specific variables and psychosocial mediators.

Policy specific variables are those that are proximal (conceptually closest), or most specifically related to the policy itself. For example, graphic warning labels should increase the prominence and noticeability of warnings, price should affect the perceived costs of cigarettes, and lifting of restrictions on alternative nicotine products should lead to increased awareness of their availability (Fong *et al.*, 2006a). Discrete behavioural changes may also occur as a result of the policy, such as smokers hesitating, or even abstaining from cigarettes because of the warning label.

Similar examples can be drawn in marketing communications. Restrictions on these should lead to reductions in awareness of the specific types of communication that have been restricted, such as billboards or press ads. Given the links found between tobacco advertising awareness and brand awareness and appreciation (Aitken *et al.*, 1985), restrictions on marketing may also reduce familiarity with tobacco brands.

Psychosocial mediators are those variables that are distal (conceptually distant) from the policy, and which are thought to be affected by multiple means, not just policies. Self-efficacy and intentions are amongst such variables. It is thought that policies will affect these general mediating

variables indirectly, through their prior effect on the policy-specific, proximal variables (Fong *et al.*, 2006a).

The ITC conceptual model includes proximal and distal measures so as to construct a causal chain model. The route from policy specific variables to behaviour can be traced through these measurements. For example, withdrawal of tobacco marketing communications may first decrease awareness of tobacco marketing activity, which may then affect awareness and familiarity with brands, perceptions of smoking norms, overall attitudes, intentions about quitting (or intention to smoke among young people), and ultimately effect behaviour, such as quit attempts, quit success or, among young people, uptake of smoking (Figure 5.13). This model allows researchers to test how policies impact or fail to impact anticipated behaviour.

Three different studies have been undertaken to assess tobacco marketing restrictions: the ITC Four Country Survey (Thompson *et al.*, 2006), the Centre for Tobacco Control Research (CTCR) study (<http://www.ctcr.stir.ac.uk>), and the Global Youth Tobacco Survey (GYTS) (The Global Youth Tobacco Survey Collaborative Group, 2002).

The ITC project brings strengths to the consumer survey design. It is longitudinal, which enables disentangling cause and affect relationships. As a

multinational study covering more than one jurisdiction, it allows for a quasi-experimental design: comparisons can be drawn between countries where specific policies are being introduced and others where they are not. It also is a telephone survey, which brings benefits in terms of sampling and ease of respondent access, but limits the complexity of the questions that can be asked because it is not possible to use show cards or any visual images.

The ITC project is conducted with adult smokers, and therefore examines effect amongst those already involved with tobacco products. A sample of over 2000 adult smokers is sought in each country at each wave of fieldwork (Thompson *et al.*, 2006).

As previously noted, consumer surveys have the advantage of enabling specific sub-groups to be studied, such as young people; some of whom will already be involved with tobacco products and some of whom will not. Consumer surveys, unlike econometric studies, enable the potential impact of tobacco marketing restrictions to be examined separately for young people. In particular, they enable the examination of how young people growing up in an environment surrounded by tobacco marketing compare with those growing up in an environment in which tobacco marketing is restricted.

The CTCR study and the GYTS focus on youth. The CTCR study is an ongoing, face-to-face,

in-home survey which, though logistically challenging, enables complex questioning procedures (particularly the use of visual aids displaying brand colours and design features). It uses cross-sectional surveys of 11-16 year olds across the UK. Surveys are conducted at approximately two yearly intervals to monitor changes in key measures (such as awareness of tobacco marketing, engagement with tobacco marketing, brand awareness and familiarity, perceived smoking prevalence, intentions to smoke, and smoking behaviour) at different time points prior and subsequent to the implementation of the UK ban on advertising and promotions (Tobacco Advertising and Promotions Act, 2002; [http://www.opsi.gov.uk/acts/acts-2002/ukpga\\_20020036\\_en\\_1](http://www.opsi.gov.uk/acts/acts-2002/ukpga_20020036_en_1)).

Approaches to measuring the marketing related measures are discussed below.

Two baseline surveys were conducted: two years prior to the ban and six months prior to the ban. These surveys provide data on young people's response to tobacco marketing prior to the regulations. Measures taken approximately 18 months post-ban gave an indication of short-term response following the initial phases of implementation of the tobacco marketing restrictions. Continuation at two year intervals will provide insights into the potential longer-term impact of these restrictions, and give an indication of the length of time before impacts may become apparent.

The GYTS is a school-based survey of 13-15 year olds which began in 1999 (The Global Youth Tobacco Survey Collaborative Group, 2002). It includes questions on prevalence of cigarette and other tobacco use, attitudes toward tobacco, access to tobacco products, exposure to secondhand smoke, school curricula on tobacco, media, advertising, and smoking cessation. The question focus, in relation to marketing restrictions, is on marketing penetration: awareness of media messages and receipt of tobacco branded items/gifts. Like the ITC Four Country study, the GYTS also uses multiple countries, a common methodology, and a core questionnaire, which has the potential to allow comparison across different levels of tobacco control (for details see Section 4.3)

#### *Limitations:*

The consumer survey approach has its limitations. It relies on gaining access to and cooperation from a representative sample of respondents, and on self-report measures which participants may under- or over-report.

The CTCR study is a national study conducted over a number of years. It monitors response to tobacco control policies as they change over time, providing data on reactions at different time points following staged implementation of the tobacco advertising and promotions ban. The lack of a comparison country or countries means that it cannot provide conclusive evidence

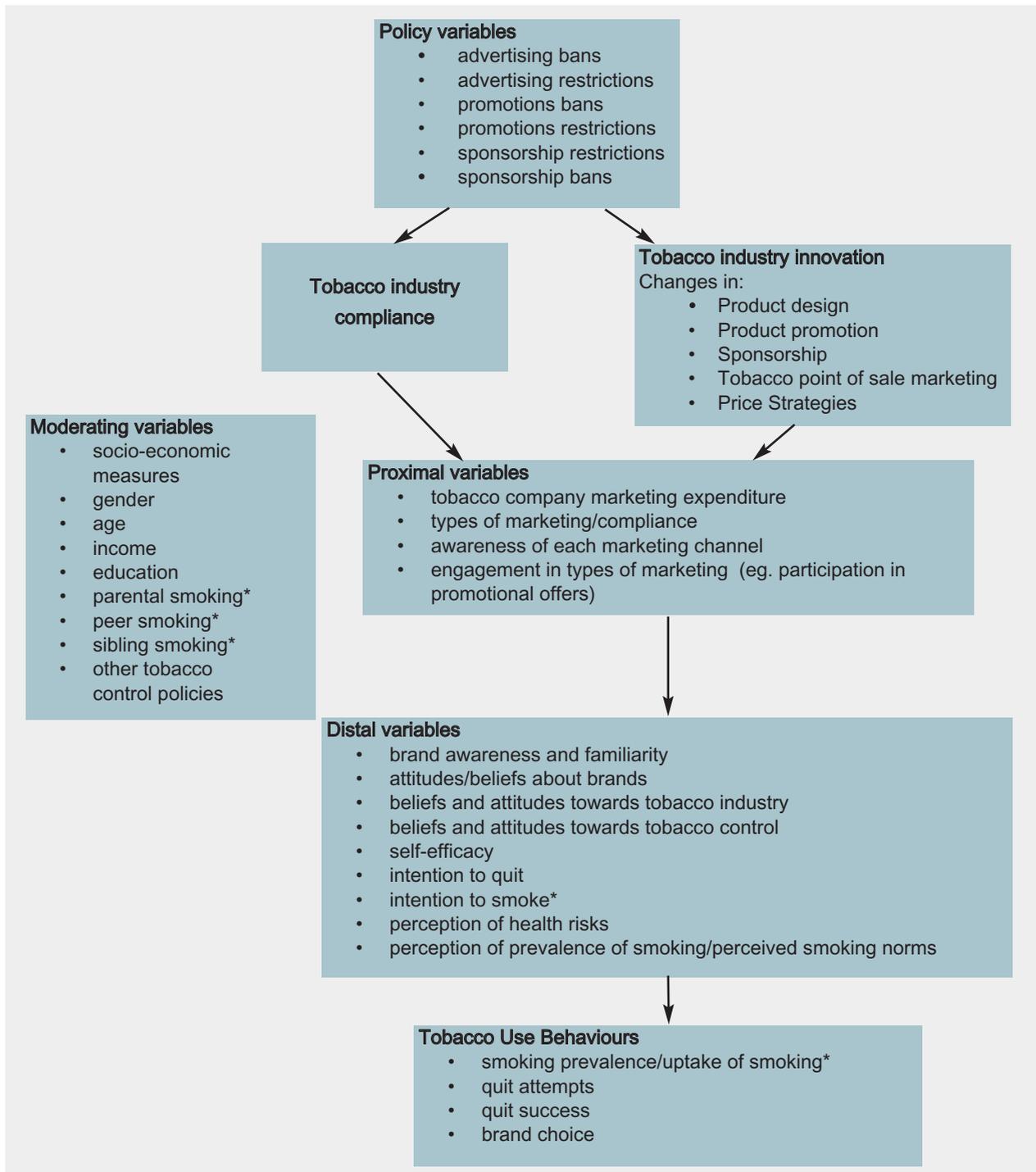
concerning the impact of tobacco control policies. Nevertheless, it is a valuable study that can add to the understanding of the likely effect of marketing restrictions, particularly where consistencies and overlaps can be seen with the ITC Four Country study.

#### *Enhancing benefits of consumer surveys:*

The benefits of consumer surveys are enhanced when complementary methods are used to measure both marketing and policy inputs; a clear notion of what is happening out there will enhance the ability to measure its effectiveness. The policy and marketing arenas need to be systematically monitored in order to gauge the effect of developments. For example, Figure 5.13 demonstrates some of the responses that the tobacco industry may take. First, there is the issue of checking compliance, but equally, if not more important, is being aware of the innovative ways the industry may compensate for newly imposed restrictions.

Research tools, which aid work in the fields of surveillance, industry document analysis, and policy tracking, have been developed which enable the measurement of inputs. Monitoring these inputs also assists in contextualising and interpreting results from the consumer surveys and may help to clarify any unusual or unexpected survey results.

Multiple studies can also help to complement and reinforce results from individual surveys.



**Figure 5.13 Conceptual framework for the evaluation of tobacco marketing restriction policies**

\*Appropriate measures for youth/adolescent studies

For example, while the CTCR study is an appropriate design for examining the responses of adolescents to the advertising and promotions ban, the lack of a comparison country limits the conclusions which can be drawn. The ITC Four Country survey monitors similar issues with adult smokers and does include comparison countries. Therefore, where findings are consistent between the two studies, the ITC Four Country study helps lend support for any findings from the CTCR study that are indicative of policy effects.

#### *Marketing surveillance:*

As part of the CTCR study, a series of marketing surveillance activities were undertaken to provide information about the marketing approaches being used by the tobacco industry both before and after the ban. This exercise was designed to capture the range and nature of activities, rather than quantify the amount of marketing activity. An observational protocol was developed to explore the tobacco industry's response to regulation in retail outlets (Devlin *et al.*, 2006); all other forms of tobacco marketing communications had been prohibited, but point-of-sale was still available. The protocol was designed to be generic to allow it to be adapted to cross-country comparisons, and to be executed longitudinally so long-term patterns could be uncovered. It was mainly comprised of closed questions requiring the trained observer to

check the applicable box. Table 5.25 lists the types of measures recorded within the stores.

A small panel of 28 retailers were recruited to participate in this protocol, and a trained observer visited every two months. The panel consisted of a sample of different store types, but was not intended to be a representative sample. Rather, this study sought insight into the range of tobacco marketing at point-of-sale and how this might change over time and in response to new restrictions.

This observational protocol could be implemented with a much larger and representative sample of stores to enable comparison of data by different store types, area types, religions, and additional characteristics. Such an approach would enable comparison of data by different store types, different area types, regions, and so on.

Observations were conducted in all 53 stores that sold cigarettes within the study community (Feighery *et al.*, 2006). Two surveyors used a protocol for counting and categorising cigarette marketing materials and shelf space allocated to cigarettes in stores. Counts were made of the features, such as number of branded signs, merchandising fixtures, and functional items, along with amount of shelf space allocated to the three most popular cigarette brands among youth in the USA. These data were used alongside survey responses to assist with development of multiple measures of adolescents' exposure to retail

cigarette marketing. Survey participants were shown photographs of the stores' exteriors, along with the names and addresses of 12 of the stores, and were asked to indicate the frequency of going to each one. Those who reported at least weekly visits to any of the specific stores in the photographs were classed as having frequent exposure to cigarette marketing.

This survey data was then combined with the observation to calculate a measure of "cigarette brand impressions per week." This was computed by multiplying the frequency of visits to the specific stores by the total number of marketing materials and product facings in each, and then summing all the individual store scores for each student.

Additional surveillance undertaken within the CTCR study includes regular audits of the press to identify any marketing or editorial coverage of tobacco products or issues. A selection of the most widely read newspapers and magazines are purchased over a one week period each six months and are content analysed for coverage of tobacco or smoking. A bi-monthly audit of the retail press is similarly undertaken to provide insight into the type of communication and messages being relayed from the tobacco industry to the retailers. A small panel of about 28 smokers also complete a form each month recording any tobacco marketing that they encounter, as well as recording their cigarette/tobacco purchases over a one week period. This gives an idea of the

**Store Information**

- Characteristics of surrounding area (residential or commercial)
- Presence or absence of tobacco ads on exterior of store
- Presence or absence of minimum age of purchase signage
- Size of outlet (number of cash registers)
- Whether tobacco products or counter visible on entry to store

**Cigarette/Tobacco Availability**

- Visibility, variety of brands, variety of pack sizes, presence of any promotions
- Positioning of tobacco products
- Which brands are most prominent
- Availability, price, and price promotion of four particular brands

**Advertising and Other Tobacco Marketing Practices**

- Presence or absence of advertising for four particular brands
- Types of promotions observed in store and associated brands
- Presence or absence of tobacco branded accessories

**Use of Functional Objects at Point-of-Sale**

- Method of displaying tobacco products
- Features of the cigarette display cabinet
- Any noticeable changes in the cabinet
- Presence or absence of tobacco branded fixtures or fittings in the store
- Presence or absence of tobacco control signage

**Table 5.25 Types of Measures Recorded within Retail Outlets to Monitor the Tobacco Industry's Response to Regulations**

wide range of marketing activities, and can include, for example, promotions that occur in night-clubs, direct mail, free gifts, and special price offers.

*Internet:*

Given the increasing restrictions on other routes for tobacco marketing, the internet requires careful monitoring. A representative sample of websites with a dominant tobacco theme were researched (Hong & Cody, 2002). Three lists of search terms were generated: general smoking terms (category A), terms commonly associated with smoking (category B), and brand names of American

tobacco corporations (category C) (see Table 5.26). All of the terms in category A, and all combined terms from categories A and B were searched. Terms from categories B and C were combined, and five search term combinations from each tobacco brand name were randomly selected using a website providing an algorithm for generating random numbers. To account for differing results from different search engines, three that employed different algorithms were used. The first 200 pro-tobacco-related websites from each search term were recorded. After removal of duplicates, there was a total of 716 websites from

which three sites were randomly selected for coding each week for reliability purposes. A coding manual and procedures were designed by a research team, in collaboration with a senior research associate and a clinical psychologist. After training on 12 websites and proving satisfactory reliability, each coder was assigned 15 websites to code per week over the period from November 1999 to May 2000. The content analysis looked for the presence or absence of five features: site category, online purchasing of tobacco products and consumer-awareness information, portrayal of human characters, lifestyle and message

Category A General Smoking Terms	Category B Terms Commonly Associated with Tobacco	Category C Tobacco Companies
Tobacco	Sports	Brown & Williamson
Cigarettes	Car racing	Philip Morris
Smokeless tobacco	Tennis	Liggett
Chew tobacco	Rodeo	RJ Reynolds
Cigars	Celebrities	
Pipe tobacco	Movies	
Snuff	Film	
	Freedom	
	Rights	
	Adventure	
	Travel	
	Cruises	
	Vacations	
	Glamour	
	Romance	
	Woman	
	Fetish	
	Sex	
	Gambling	
	Wine	
	Cognac	
	Beer	
	Champagne	

Adapted from Hong & Cody (2002)

**Table 5.26 Categories of Search Terms Used to Sample Pro-Tobacco Websites**

appeals, and interactive site features. It is therefore recognized that this media is an unmonitored, unregulated source of tobacco marketing targeting young people.

*Internal tobacco industry document analysis:*

Following the Master Settlement Agreement in the USA and the Health Select Committee's investigation into tobacco companies in the UK, online databases of the tobacco industry's internal documents are available

to search<sup>2</sup> (<http://www.tobaccoarchives.com> and <http://www.tobaccopapers.com>). The analysis of industry documents has shown that they clearly recognise the power of advertising to retain and recruit smokers, despite their public pronouncements to the contrary (Hastings & McFadyen, 2000; Cummings *et al.*, 2002a). Similarly, documents detailing industry's reactions to "inputs," and their strategies for dealing with them, can be used to measure the effects of tobacco restrictions. For example, a study into how the tobacco industry

circumvented Singapore's advertising ban based its findings on internal industry documents (Assunta & Chapman, 2004b). In this study, document collection websites, primarily the Tobacco Archives, were systematically searched using geographic terms and the names of public and private entities relating to Singapore. The resulting documents were then dated, evaluated according to their degree of importance, and a select group were subjected to further analysis. The findings allowed the researchers to examine how the

<sup>2</sup>Marketing search terms for the database should include the following: above the line, advert, below the line, billboard, brand, campaign, coupon, customer, direct mail, email, internet, marketing, mass media, packaging, point-of-purchase, point-of-sale, poster, pricing, product placement, promotion, samples, SMS, target, text message, and website. This list is not exhaustive and care must be taken to search for variations and plurals, possibly by truncation, of the terms above. Brand names should also be included in the strategy (see Cummings *et al.*, 2002a for further search strategies using online databases, and Mekemson & Glantz, 2002 for a sample strategy to locate documents covering tobacco and smoking product placement in movies).

tobacco companies conducted their business in the strict anti-tobacco environment present in the country, and attempted to counter some of the government's tobacco control measures. With knowledge of this kind, it is possible to both tackle the tobacco industry's creative responses to restrictions and monitor the extent to which they are working.

### *Policy tracking:*

Although there has been increased interest in the field of tobacco control policy research, there have been few published accounts of the measurements of the comprehensiveness and strengths of policies (Wakefield & Chaloupka, 1998). A ratings system was developed and implemented which evaluated the extensiveness of state laws restricting youth access to tobacco in the USA (Alciati *et al.*, 1998). State laws were analysed on youth access to tobacco and assigned ratings on nine items: six on tobacco-control provisions, and three on enforcement provisions. For each item, a target was specified reflecting public health objectives. Points were awarded for achieving the target, while criteria for lower ratings were established for situations when the target was not met. Ratings produced by this type of system can, by producing maximum values, indicate that all ideal aspects of a law are in place, facilitate comparison among states (and possibly among countries), permit tracking of changes over

time, and make it theoretically possible to relate tobacco control "inputs" to "outputs" (Wakefield & Chaloupka, 1998).

### **Consumer surveys: the questions to ask**

The types of questions that can be used in consumer surveys will be examined, as well as how to identify the issues that should be addressed and developing specific questions to measure them.

Previous studies on the influence of tobacco advertising and marketing can help form a basis for identifying the issues that ought to be examined when measuring the impact of restrictions on marketing. Understanding the relationships between advertising/marketing, and other variables, helps to develop hypotheses about which variables might be expected to be influenced by the elimination of, or severe restrictions on, marketing. The focus here will be on marketing-related proximal and distal variables (see Figure 5.13). Proximal variables are conceptually closest to the restrictions being imposed on marketing communications. First, an assessment must be made of awareness, familiarity, and engagement with specific types of marketing communication to see whether, and to what extent, these lessen when marketing restrictions are imposed. Identifying suitable measures requires familiarity with the content of the marketing restrictions which are to be implemented. This knowledge

gives an indication of which marketing practices are going to change or be eliminated, and provides a guide to which measures would be expected to show an impact. For example, in 2003 the UK introduced a comprehensive ban on most forms of tobacco marketing communication, which was implemented in phases from February 2003 until July 2005. It was important to check whether awareness of each prohibited medium, which during the first phase included billboards and press advertising, had reduced. At the same time, it was also useful to measure whether remaining, unrestricted media, which included point-of-sale displays, had increased.

As well as specific media, it is also crucial to monitor the cumulative effect that wide ranging bans can have by disrupting the integrated marketing communications mix. As discussed previously, this is a vital pillar in the industry's attempts to build and maintain evocative brands. It therefore is logical to develop measures of brand salience and image, and monitor how these fair, following policy changes.

Sample questions are drawn from the GYTS and the two ongoing longitudinal studies discussed previously (the ITC Four Country study and the CTCR study). These studies have slightly differing methodologies: the ITC Four Country study is a telephone survey which brings benefits in terms of sampling and ease of respondent access, but limits the

complexity of the questions that can be asked because, for example, it is not possible to use show cards. The CTCR study is a face-to-face, in-home survey which is logistically more difficult, but enables complex questioning procedures; particularly the use of visual aids displaying brand colours and design features. The GYTS is a school-based, self-completion survey of 13-15 year olds, which again limits the complexity of the questions that can be asked.

The studies also target different sub-groups: the ITC consists of a cohort of adult smokers, the CTCR study is conducted with a cross-section of young people aged 11 to 16 years, and the GYTS consists of students aged 13-15 years. Therefore, while some measures may be common, others will be specific to the particular target group. For example, in the ITC study, it makes sense to look at adult smokers' cessation behaviour following marketing restrictions, whereas, with young people in the CTCR study (the majority of whom do not smoke), it is more relevant to look at measures of intention to smoke (see Figure 5.13).

### **Specific types of marketing communication**

Despite a ban on marketing, and thus limited exposure, there can still be significant penetration and continuation of the relationship between marketing and youth smoking (Braverman & Aarø, 2004). Therefore, at the most basic level, there is a need to try and

establish how much marketing communication is still getting through. It is difficult to ascertain this, however, without confusing the respondent. Terms like "marketing communications," which are technically correct and capture the generality of the concept, are less likely to be understood than more familiar words like "advertising" or "promotion," which will not capture the breadth of activity that may be involved (see Table 5.23), and may not be consistently interpreted.

Hence, qualitative research played a crucial role in the development of the questionnaire for the CTCR study, ensuring appropriate and comprehensible questioning about a wide range of tobacco marketing activities. While young people could visualise and describe images of conventional advertising (i.e. press, poster, and television adverts), it was much more challenging to get them to think about, and describe, other forms of marketing communications.

The qualitative interviews therefore tried to focus the young respondents' minds on different locations where they might be exposed to tobacco marketing communications, and walk them through various circumstances, asking them to describe any ways that they might see or have their attention drawn to products. For example, they were asked to imagine themselves walking into a shop, and to describe all the things they could see when they approached the door, entered the shop, approached the counter, etc.

In this way the interviews opened their minds to the broader range of marketing practices and encouraged them to describe these in their own terminology. This not only helped with understanding the language and concepts young people use to describe marketing communications, but also revealed the range of promotional activity to which they were aware of being exposed to.

In subsequent focus groups, prompt cards, with descriptions of different forms of tobacco marketing, were developed and presented to respondents, to examine whether or not they could relate to and understand the descriptions. The final stage was to pilot the questions using cognitive interview techniques, whereby respondents were interviewed using the questionnaire and, upon completion, were interviewed to analyse their comprehension of specific questions and their ability to answer them.

The result was the development of questions that described specific tobacco marketing communications in a young person friendly way (see Figure 5.14). Furthermore, because respondents might be interviewed in the presence of a family member, their privacy was protected by presenting the various descriptions on prompt cards, so they could express their answers confidentially.

Figure 5.15 shows how the ITC attempted to gain an overall measure of awareness of tobacco marketing using very general lay terminology. Whereas the CTCR

question did not impose a time frame, the ITC study tried to limit recall to the previous six months to help participants focus their attention on a specific and manageable period. This is less than ideal; it could, for instance, pick up non-marketing influences such as peer smoking or be interpreted differently by respondents. Nonetheless, it does help to start putting together a picture of what may be happening. When asked alongside other more specific questions, it provides a useful gauge for the amount of pro-smoking messages that are being perceived. Furthermore, it is likely to provide a general measure of tobacco marketing, as it has been argued that advertising can affect behaviour even if an advert is not actively processed and respondents cannot recall seeing it (Shapiro *et al.*, 1997).

Figure 5.16 looks at specific media and measures how successfully any controls are working by examining awareness of communications in each of these. The media included in this question can be varied to suit the jurisdiction (e.g. in the UK, where television advertising for tobacco products has been forbidden for nearly 20 years, this option may be omitted).

The GYTS survey takes a slightly different approach. It focuses on specific media and asks young people to rate the amount they have seen within a short prior time period of one month (Figure 5.17). While these questions are likely to sufficiently discriminate between those who do and do not recall each form of

advertising, there is the possibility of some ambiguity over the amount recalled. Response categories of “a lot” and “a few” may be too ambiguous to appropriately distinguish between different amounts recalled; one respondent’s perception of “a lot” may be another’s perception of “a few”.

Other forms of tobacco marketing communications need to be addressed with separate questions; sports and event sponsorship need careful consideration. In the ITC survey it was important to try and distinguish between overt brand sponsorship (e.g. Marlboro or Formula 1) from more covert corporate social responsibility (e.g. the British American Tobacco Company’s support for good causes, such as farming methods in Malawi). Therefore, a rather complicated set of questions were asked here (Figure 5.18).

In the ITC survey, respondents found it difficult to answer this bank of questions, so it may be preferable to use the slightly simpler version presented in Figure 5.19. This is a classic example of the dilemma faced by questionnaire designers: how to reflect the complexities of the real world by phrasing accurate questions that do not cause confusion (for a detailed discussion about issues related to question wording see Oppenheim, 1992).

The CTCR study was also interested in which sports or events young people associated with tobacco and, where possible, the brands they connected with these (Figure 5.20).

The GYTS measures awareness of cigarette brands on TV, including those within coverage of sporting events (see Figure 5.21). This is likely to provide a measure of overall awareness of cigarette brands on television, but does not specifically measure awareness of sports sponsorship. Again, the response categories rate frequency, which may give rise to ambiguity.

The remaining form of marketing communication is, rather confusingly, referred to as a “promotion.” This can come in many guises: from money-off coupons to free samples, as illustrated in Table 5.24. All these variants need to be covered. An extra complexity is the need to measure not just awareness of these activities, but participation in them (e.g. have people taken advantage of price promotions, as well as hearing about them). The ITC study drew on knowledge gained from the CTCR study and also subdivided promotions down into specific descriptions of marketing (Figure 5.22).

## Measuring branding

Branding is a traditional advertising method used to create a response from a target audience based on cumulative impressions and positive reinforcement. At one level, measuring branding is no more complex than measuring individual marketing communications, and simple measures can be constructed to determine spontaneous and prompted awareness of different brands

I'm going to show you some cards (SHOWCARDS 10-26) with descriptions of some other ways that companies might try to attract attention to cigarettes. For each one can you tell me if you have seen anything like this.

*(Answer categories were: Yes; No; or Don't Know. For each marketing type responders were aware of, they were asked to say which make or brand it was connected with.)*

- a. SHOWCARD 10 Advert for cigarettes on large posters or billboards in the street
- b. SHOWCARD 11 Advert for cigarettes in newspapers or magazines
- c. SHOWCARD 12 Signs or posters about cigarettes in shops or on shopfronts:
  - on shop windows
  - on shop doors
  - on cigarette display units inside shops
  - on clocks inside shops
  - on staff aprons or overalls
  - on signing mats inside shops
  - some other sign or poster about cigarettes (in shops or on shopfronts)
- d. SHOWCARD 13 Free trial cigarettes being given out or offers to send away for free cigarettes
- e. SHOWCARD 14 Free gifts from the shop keeper when people buy cigarettes
- f. SHOWCARD 15 Free gifts when people save coupons or tokens from inside cigarette packs
- g. SHOWCARD 16 Free gifts when people save parts of cigarette packs (eg. pack fronts)
- h. SHOWCARD 17 Free gifts, showing cigarette brand logos, being given out at events such as concerts, festivals or sports events
- i. SHOWCARD 18 Special price offers for cigarettes
- j. SHOWCARD 19 Promotional mail, from cigarette companies, being delivered to people's homes
- k. SHOWCARD 20 Clothing or other items with cigarette brand names or logos on them
- l. SHOWCARD 21 Competitions or prize draws linked to cigarettes
- m. SHOWCARD 22 Famous people, in films or on TV, with a particular make or brand of cigarettes
- n. SHOWCARD 23 New pack design or size
- o. SHOWCARD 24 Internet sites promoting cigarettes or smoking (do **not** include anti-smoking sites)
- p. SHOWCARD 25 Email messages or mobile phone text messages promoting cigarettes or smoking (do **not** include anti-smoking messages)
- q. SHOWCARD 26 Leaflets, notes or information inserted in cigarette packs
- r. NO SHOWCARD Have you come across any other ways that companies try to attract attention to cigarettes?

**Figure 5.14 Question assessing awareness and involvement in tobacco promotions**

Centre for Tobacco Control Research (CTCR) Ad-ban study (University of Strathclyde)

Thinking about everything that happens around you, in the last 6 months how often have you noticed things that promote smoking?

01	–	Never
02	–	Rarely
03	–	Sometimes
04	–	Often
05	–	Very Often

**Figure 5.15 General Measurement of Pro-Smoking Messages in the International Tobacco Control Policy Evaluation Study**

Now I want to ask you about tobacco advertising. In the last 6 months, have you noticed cigarettes or tobacco products being advertised in any of the following places?

*(Read out each statement)*

- 01 – Yes
- 02 – No

- a. On television
- b. On radio
- c. At the [cinema/movie theatre], before or after the [film/movie]
- d. On posters or billboards
- e. In newspapers or magazines
- f. On [shop store] windows or inside [shops/stores] where you buy tobacco
- g. Other

**Figure 5.16 Measuring Awareness of Tobacco Ads in Specific Media in the International Tobacco Control Policy Evaluation Study**

(Figure 5.23). The latter of course requires visual prompts depicting a selection of brands. However, there is the need to delve deeper and assess not just the ability to recall brands, with or without prompting, but familiarity and engagement with them. The former can be done by checking if respondents can complete par-

tially masked brand examples, as in Figure 5.24.

Deeper engagement ventures into the rather illusive area of “brand image:” the emotional associations and feelings that are attached to marques, such as for Marlboro or Benson & Hedges. As noted earlier, the tobacco industry goes to great lengths and expense

to create evocative images for their brands, and arguably a key task of tobacco control in general, and marketing restrictions in particular, is to undermine them. Measuring the results is tricky; this type of complexity lends itself more readily to qualitative methods than quantitative ones. Nonetheless, questionnaires can be used successfully to tackle the problem. Figure 5.25 illustrates how semantic scales can help unravel dimensions like popularity, appeal to specific sub-groups, and masculinity. Rating, ranking, and “pick-any” (in which respondents are asked which brand(s), if any, they associate with a series of attributes) measures of brand image associations have been reported to be comparable (Driesener & Romaniuk, 2006).

## Conclusions

This section has explained what is meant by tobacco marketing communications, that they do influence tobacco consumption, especially by the young, and that it is therefore crucial to instigate controls and measure their effectiveness. It has been shown that this can best be done by monitoring a range of distal and proximal variables using consumer surveys.

Consumer surveys are further enhanced when surveillance systems are put in place to monitor changes in tobacco marketing activity following restrictions. This helps in contextualising the findings and

During the past 30 days (one month), how many advertisements for cigarettes have you seen on billboards?

- a. A lot
- b. A few
- c. None

During the past 30 days (one month), how many advertisements or promotions for cigarettes have you seen in newspapers or magazines?

- a. A lot
- b. A few
- c. None

**Figure 5.17 Measuring Awareness of Tobacco Ads in Specific Media in the Global Youth Tobacco Survey**

In the last 6 months, have you seen any advertising by tobacco companies that is NOT promoting particular products or brands, but the COMPANY itself?

- 01 – Yes
- 02 – No

Still thinking about the last 6 months, have you seen or heard about any sport or sporting event that is sponsored by or connected with BRANDS of cigarettes?

- 01 – Yes
- 02 – No

In the last 6 months, have you seen or heard about any sport or sporting event that is sponsored by or connected with tobacco COMPANIES?

- 01 – Yes
- 02 – No

In the last 6 months, have you seen or heard about any music, theatre, art, or fashion events that are sponsored by or connected with BRANDS of cigarettes?

- 01 – Yes
- 02 – No

In the last 6 months, have you seen or heard about any music, theatre, art, or fashion events that are sponsored by or connected with tobacco COMPANIES?

- 01 – Yes
- 02 – No

**Figure 5.18 Measuring Tobacco Sponsorship the Hard Way in the International Tobacco Control Policy Evaluation Study**

In the last 6 months, have you seen or heard about any sport or sporting event that is sponsored by or connected with a tobacco company or brand?

01 – Yes

02 – No

In the last 6 months, have you seen or heard about any music, theatre, art, or fashion events that are sponsored by or connected with a tobacco company or brand?

01 – Yes

02 – No

**Figure 5.19 A Simpler Way of Measuring Tobacco Sponsorship in the International Tobacco Control Policy Evaluation Study**

interpreting any changes or lack of expected changes.

The consumer surveys need to take baseline measures prior to any changes in marketing restrictions, and several follow-up surveys over a period of years to monitor short-term and longer-term effects. The length of follow-up will partly be dictated by the implementation time table of the restrictions. For example, in the UK their ban was implemented

in phases, making it conducive to conducting follow-up surveys after each phase.

The final subsection examined specific questions that have been successfully used to do this monitoring and showed how particular questions will vary depending on the target group and the administration mode.

In applying the methodologies discussed here, however, it is important to recognise that the

precise wording of questions will vary according to the sample being interviewed. Before going into the field, therefore, it is crucial to conduct a thorough pilot study. This should include qualitative work to check matters of content and language, and quantitative research to check understanding and feasibility.

Can you think of any sports or games that are sponsored by or connected with any makes or brands of cigarettes?

FOR EACH SPORT or GAME MENTIONED, ASK: What make(s) or brand(s) is it connected with?

PROBE FOR SPORT/GAME AND MAKE(S)/BRAND(S)

REPEAT FOR MAXIMUM OF 6 SPORTS/GAMES

<b>Sport or Game</b>	<b>Make(s) or Brand(s)</b>
1. ....	.....
2. ....	.....
3. ....	.....
4. ....	.....
5. ....	.....
6. ....	.....

Can you think of any other events or shows that are sponsored by or connected with any makes or brands of cigarettes?

FOR EACH EVENT or SHOW MENTIONED, ASK: What make(s) or brand(s) is it connected with?

PROBE FOR EVENT? SHOW AND MAKE(S)/BRAND(S)

REPEAT FOR MAXIMUM OF 6 SPORTS/GAMES

<b>Event or Show</b>	<b>Make(s) or Brand(s)</b>
1. ....	.....
2. ....	.....
3. ....	.....
4. ....	.....
5. ....	.....
6. ....	.....

**Figure 5.20 Measuring Awareness of Tobacco Sponsorship Among Young People in the Centre for Tobacco Control Research (CTCR) study at the University of Strathclyde**

During the past 30 days (one month), when you have watched sports events or other programmes on TV how often did you see cigarette brand names?

- a. I never watch TV
- b. A lot
- c. Sometimes
- d. Never

**Figure 5.21 Measuring Sponsorship in the Global Youth Tobacco Survey**

In the last 6 months, have you **noticed** any of the following types of tobacco promotion:

READ OUT EACH STATEMENT

01 – YES

02 – NO

- a. Free samples of cigarettes. **If yes:** Have **you** received free samples of cigarettes?
  - b. Special price offers for cigarettes. **If yes:** have **you** used special price offers?
  - c. Free gifts or special discount offers on other products when buying cigarettes?
  - d. (IF YES) Were these free gifts or special discounts from:
    - 1. the shop-keeper when buying cigarettes
    - 2. you or someone else saving coupons or tokens from inside cigarette packs
    - 3. you or someone else saving parts of cigarette packs (e.g. pack fronts)
    - 4. free gifts showing cigarette brand logos, given out at events such as concerts, festivals or sports events
- If yes to any of the above ask:** Have you personally received such gifts?
- e. Email messages promoting cigarettes or tobacco products. **If yes:** Have you received promotional email messages?
  - f. Mobile phone text messages promoting cigarettes or tobacco products. **If yes:** Have you received mobile phone text messages...
  - g. Mail promoting cigarettes or tobacco products. **If yes:** Have you received.....
  - h. Clothing or other items with a cigarette brand name or logo. **If yes:** have you received....
  - i. Competitions linked to cigarettes. **If yes:** have you participated in any competitions linked to cigarettes?
  - j. Internet sites promoting cigarettes or tobacco products. **If yes:** Have you visited any internet sites.....
  - k. Leaflets promoting cigarettes or tobacco products. **If yes:** Have you received any leaflets .....
  - l. Signs or posters or branded items in bars, pubs or clubs

**Figure 5.22 Measuring Awareness and Involvement in Tobacco Promotions in the International Tobacco Control Policy Evaluation Study**

Can you tell me the names of as many makes or brands of cigarettes that you have either seen or heard of:

Record up to a maximum of 10 .....

Question: Now can you tell me whether you have seen any of these makes before?

VISUAL PROMPTS 6-10

POINT TO EACH PROMPT ONE AT A TIME

FOR EACH ONE ASK: Have you ever seen this one?

Visual prompt	Yes	No	Don't Know
6. Windsor Blue			
7. Berkeley			
8. Benson & Hedges			
9. Lambert & Butler			
10. Marlboro			

**Figure 5.23 Measurement of Brand Awareness in the Centre for Tobacco Control Research (CTCR) study at the University of Strathclyde**

I'm going to show you some packets of cigarettes that have the name covered up on them. For each one I'd like you to tell me what make or brand you think it is. Please don't worry if you don't know the make or brand.

SHOW VISUAL PROMPTS

This brand is very popular with people my age

Benson & Hedges	1	2	3	4	5
Lambert & Butler	1	2	3	4	5
Marlboro	1	2	3	4	5

This brand is very unpopular with people my age

DK

6
6
6

You never see this brand in shops around here

Benson & Hedges	1	2	3	4	5
Lambert & Butler	1	2	3	4	5
Marlboro	1	2	3	4	5

You always see this brand in shops around here

DK

6
6
6

**Figure 5.24 Measurement of Brand Familiarity in the Centre for Tobacco Control Research (CTCR) at the University of Strathclyde**

Most smokers smoke this brand					Few smokers smoke this brand	
					DK	
Benson & Hedges	1	2	3	4	5	6
Lambert & Butler	1	2	3	4	5	6
Marlboro	1	2	3	4	5	6
Attractive looking brand					Unattractive looking brand	
						DK
Benson & Hedges	1	2	3	4	5	6
Lambert & Butler	1	2	3	4	5	6
Marlboro	1	2	3	4	5	6
Female brand					Male brand	
						DK
Benson & Hedges	1	2	3	4	5	6
Lambert & Butler	1	2	3	4	5	6
Marlboro	1	2	3	4	5	6

**Figure 5.24 Measurement of Brand Familiarity in the Centre for Tobacco Control Research (CTCR) at the University of Strathclyde**