TITLE: Cigarettes, snus and status: Differences in lifestyle of different tobacco user groups in Norway

AUTHOR: Gunnar Sæbø

AUTHOR'S AFFILIATION: Norwegian Institute of Public Health (FHI), P.O. Box 4404 Nydalen, N-0403 Oslo, Norway

AUTHOR'S E-MAIL: gunnar.saebo@fhi.no

Abstract

During the last decades smoking has been marginalized. Current tobacco policy is characterized by a continuous denormalization of *all* forms of tobacco consumption. Yet, many people still use tobacco. This article highlights a possible cultural explanation for this: different tobacco products and uses are included in lifestyles of different social status and prestige, and vary in legitimacy. Using nationally representative data of the Norwegian adult population and drawing conceptually and methodologically on Bourdieu's cultural sociology, I show that differences in socio-cultural practices (including tobacco use) are manifested in a structured "space of lifestyles", homologous to the structure of the objective "space of social positions". The contents of the various lifestyles (as identified by multiple correspondence analysis) informs the cultural distinctions associated with tobacco use.

Keywords: Smoking, smokeless tobacco, lifestyle, distinction

Introduction

Smoking in the Western world has declined significantly over the past decades (Brandt, 2007). Several health-based initiatives, such as smoking bans, tax hikes and information campaigns, have reinforced a cultural shift towards smoke-free environments. Policies seeking to denormalize all forms of tobacco use have been effective. Smoking in regions where strict tobacco control regimes are in place (e.g. Northern Europe, USA and Australasia) is now a quite stigmatized social practice (Graham, 2012; Stuber, Galea & Link, 2008). Many of the remaining smokers in these populations are addicted to nicotine, and while some have tried unsuccessfully to stop, others do not want to. Since tobacco use is linked to an experience of individual autonomy, strict tobacco laws may also provoke reactance and social resistance (Erceg-Hurn & Steed, 2011; Factor, Kawachi & Williams, 2011).

Even if smoking to an increasing degree occurs concentrated – socially, geographically and economically – among marginal groups, the remaining group of smokers is characterized by a certain socio-demographic heterogeneity (Lund & Lindbak, 2007). Tobacco use is also associated with value ambivalence, especially among adolescents (Plumridge, Fitzgerald & Abel, 2002; Scheffels, 2009). In addition, there are differences in meaning between various tobacco products. The historical connotations of pipe and cigar smoking are different from those of cigarette smoking (Klein, 1995). While smoking a pipe has been associated with contemplation and intellectuality, the cigar has been linked to economic power and self-confidence (Gately, 2001). The cigarette has been in a more neutral position (Callison, Karrh & Zillmann, 2002). Today's young adults, however, consider the use of manufactured cigarettes and rolling tobacco with very different gazes: While the consumption of manufactured cigarettes can still be considered identity construing in a positive way, rolling tobacco is associated with addiction and low status (Scheffels, 2008). The smokeless tobacco product "snus" (which is legal only in some regions, like USA and Scandinavia) differs from other tobacco products in that consumption rates have risen in recent years. It is also surrounded by an aura of "trendiness" in many youth and sport milieus (Nordby & Wood, 2008; Wiium, Aaro & Hetland, 2009). Against this background, it is reasonable to assume that status differences between rolling tobacco, cigars, pipes, cigarettes and snus may still exist, and that these differences will be reflected and maintained by the socio-cultural profiles, various lifestyle practices and ways to use tobacco products associated with different user groups.

Research problem

Basing my analysis on Bourdieu's (1984) theory of lifestyle and taste, I describe in this article status differences associated with consumption of different types of tobacco product. Status differences are not only expressed by income and education, they are also reflected in consumption patterns and everyday activities. Accordingly, I will identify status differences by embedding different uses of tobacco within broadly defined "collective lifestyles" (Frohlich, Corin, & Potvin, 2001). This analytical approach differs from established perspectives on health behaviour, which often conceive of tobacco use as the health behaviour of individuals, in viewing tobacco use as a social practice embedded in routinized collective lifestyles. This conceptualisation emphasises the importance of social context to explain and understand tobacco use (Poland, Frohlich & Haines, 2006).

The research was carried out in Norway, a European country known for its strict tobacco laws, low and decreasing smoking prevalence, countered by growth in use of smokeless tobacco among adolescents and young adults (Lund & Lindbak, 2007). As lifestyle differences in themselves can express status differences, it becomes an empirical question whether the differences between tobacco user groups are so large and of such quality (i.e. adequately symbolically charged) to constitute crucial "distinction differences" in the Norwegian culture. If so, they must not only stand in distant opposition to each other in social space, but also be associated with other, relatively uniform areas of activities and goods, and with different capital structures – in short, *habitus* and class differences.

Using multiple correspondence analysis, the following questions will be addressed: (a) What activities and points of view characterize the lifestyles that can be identified and how is tobacco use included in the different lifestyles? (b) What capital structures are associated with different lifestyles and tobacco use? First, I analyse the relations between *use of snus*, *combined use of smokeless tobacco and cigarettes*, *daily smoking, occasional smoking* and *non-tobacco use* in the population (15 years or older) as a whole. Second, I probe the relations between *cigar smoking, pipe smoking, rolling tobacco smoking, smoking mild cigarettes*, *smoking manufactured cigarettes* and *snus use* in the social space of tobacco users. Do we find the same lifestyle differences when we analyse tobacco users only? As far as I know, no such systematic comparison of various tobacco users has been conducted previously.

Theoretical assumptions

Distinction differences between various tobacco products and various uses

Historically, smoking in the Western world has developed from being an upper class practice and expression of a distinguished *habitus* in the 1800s to become popular and widespread in the 1950s, until it now has become more of a low status phenomenon (Brandt, 2007). Basically, smoking is an expression of "elementary" taste, which is also linked to other forms of basic tastes, such as food and drinking habits. When smoking as a social practice has become as sharply devalued as it has in only a few decades, this is not primarily based on the physical flavour of smoking, but rather the development in the aesthetics of smoking, which can best be described as "de-aestheticization". Although it has always been – and still is – possible to find glamorous depictions of smoking, for example in internationally distributed magazines and on the Internet, the overall gaze on smoking has become increasingly healthoriented. This has happened gradually since the detection of the causal association between smoking and lung cancer in the early 1960s. Aesthetically speaking, daily smoking is today largely an expression of a "vulgar" taste (Brandt, 2007).

Nevertheless, the gaze on smoking will never be "purely" aesthetic; as Bourdieu (1984) points out, it will always be socially constituted. When different uses of tobacco in the following are to be understood as expressions of unequal status and taste, this means that tobacco use continues to function as a possible *marker of distinction*. The definition of "good" and "bad" lifestyles, "cool" and "uncool" tobacco practices and the like is related to which categories gain approval to *designate* reality. Because smoking (compared to non-smoking) or preference for one tobacco product (compared to other products) as social practices will always be an expression of class-associated *habitus* they may also be categorized in different ways, because they are included in different classes with different dispositions. Habitus can be understood as dispositions: "generative principles of distinct and distinctive practices" (Bourdieu, 1998:8).

Now that tobacco control policy draws in the direction of denormalization of *all* tobacco consumption, and categorization of tobacco use and users is steered towards marginalization (Chapman & Freeman, 2008), the differences in tobacco user status will be even more affected by their overall lifestyle. This relates also to tobacco consumption as potential *signs* of different lifestyles: in the contemporary tobacco culture, it seems "better" to smoke a cigar than to smoke rolling tobacco, in the sense that social elites may well allow themselves to be photographed with a cigar, but not with a hand rolled cigarette. It also seems

"worse" to smoke rolling tobacco daily than manufactured cigarettes occasionally, because daily smokers are often low educated and do not signal the same control over their own smoking habits as the educated social smoker does (Krange & Pedersen, 2001). In this reasoning, traditional beliefs and stereotypes about different tobacco users are expressed: cigar smokers are powerful and dynamic, social smokers are intellectuals exercising selfcontrol, rolling tobacco smokers are nicotine dependent workers, etc. (Gately, 2001).

Snus use is particularly interesting in this context, as this tobacco product seems to have a different and possibly more positive meaning than the vulgarized combustible smoking products (Nordby & Wood, 2008; Wiium et al., 2009). The logic of distinction suggests that taste-related habits and perceptions will change over time. When practices that have been exclusive become delegitimized (just as cigarette smoking has), the search for exclusivity will find new markers (for example snus) (Bourdieu, 1984). But although there is now, perhaps, a new generation of young people ready to favour snus – a generation without historical associations with snus and chewing tobacco as "messy" – this does not mean that snus use will automatically be sign of high status. Awarding high status to a person or activity will also depend on whether the person has a relatively high amount of capital or that the activity is awarded value, based on the socio-cultural context in which it is embedded (or possibly stands in opposition with). Snus use can thus achieve higher status than other tobacco consumption by the lifestyle practices associated with it having a higher status than lifestyle practices that other tobacco uses are embedded within.

Homologies between the space of lifestyles and the space of social positions

Bourdieu's analytical grip in *Distinction* (and in many other works) consists in constructing multiple and diverse geometric spaces, which are studied both separately and in conjunction, with respect to similarities and differences. While the analysis of the *space of lifestyles* will reveal meaning-based relations, the *space of social positions* shows the differentiation mechanisms that operate in the community under study, and thus also the power relations most prominent in the social space. Studies by both Bourdieu (1984) and others have revealed two main principles of differentiation, that is, a tendency for the total capital amount to be the primary social differentiation mechanism, while the relationship between economic capital (material wealth) and cultural capital (educational knowledge in its embodied state) will be of secondary importance. This latter principle is called "the capital composition principle".

The point of placing tobacco practices within a national social space is to analyse the distances between the various collective lifestyle contexts that tobacco use is included in, and simulaneously illustrate health inequalities (Veenstra, 2007). By connecting the analysis of lifestyle with social position, it becomes possible to illuminate power relations associated with the social topography of tobacco consumption, and to illustrate how tobacco use at the same time can be related to both marginalization and normality, based on the various user groups' position in the social space. The analysis of the collective lifestyles also highlights localization of tobacco practices in specific environments, and aspects of social identity and symbolic consumption that help to define the nature of lifestyles and the distinction differences between them (Poland et al, 2006).

Methods

Data

The data were obtained from *Norwegian Monitor 2007*, a comprehensive survey conducted under the auspices of IPSOS. A representative sample of the Norwegian population, aged 15 and above, was asked a series of questions related to social activities and cultural values (see Hellevik (2008) for a presentation of the study's design and procedures). Data were collected in 2007. To improve representativeness, data were weighted by gender, age and region (N=3775).

In *Norwegian Monitor*, a number of lifestyle components are highlighted. In addition to tobacco use, I concentrate on the following: *media use and media interest, technology use, physical activity, eating and drinking habits, travel and vacation habits, selected shopping habits* and *cultural participation*. In line with Bourdieu's theoretical holism, I include variables from each of these areas and conduct a multiple correspondence analysis of the data (Le Roux & Rouanet, 2010).

Selection of lifestyle indicators

In addition to a theoretical ambition of holism, thematic and balanced spread of questions is essential for methodological considerations. This is to avoid some of the lifestyle areas dominating at the expense of others in the construction of spaces (Le Roux & Rouanet, 2010, p. 38). Even if correspondence analysis is suited to handle several variables at once, the number of variables needs to be limited. First, this is important to keep track in the interpretative work. Second, the explained variance tends to sink the more variables are included in the model. The model does not necessarily become more appropriate for the underlying reality, the more variables are included. It is equally important to identify variables crucial for the *configuration of the underlying structure*.

The selection of lifestyle indicators to the correspondence analysis is thus based on a combination of theoretical and statistical arguments. The main concern was to represent the most common chores and social arenas from each lifestyle area. E.g. in relation to media use, measures should include use of the main media channels – public service television (NRK), leading national newspaper (Aftenposten) and cinema - while the measures for eating and drinking habits should include vital meals like breakfast and dinner.

Each response alternative constitutes a "modality". I have applied 5 modalities for tobacco use, 48 for media use, 14 for media interest, 14 for technology use, 10 for physical

activity, 35 for eating and drinking habits (including alcoholic beverages), 20 for travel and vacation habits, 15 for selected shopping habits, 18 for cultural participation and other activities, and 18 for some relevant attitudes and values. In all, 197 modalities based on 84 variables were applied (see online supplementary material, table A1).

The background variables used to "explain" the positioning of lifestyle relations in social space are personal income (measure of "economic capital"), highest completed education (measure of "cultural capital"), number of books read last year (measure of "cultural capital") and gender, age, social standing, line of business, public/private employee and parental education. In all, 55 supplementary points were applied (see online supplementary material, table A2)

Wider questions concerning tobacco use were applied in the analysis of tobacco users only: "Would you say you smoke daily, occasionally or never?", "Which of these types of tobacco do you smoke?" (cigars, pipe, RYO, mild/light cigarettes, regular manufactured cigarettes); "How many cigarettes do you smoke per day (Don't smoke daily, 1-4, 5-9, 10-14, 15 or more); and "Would you say you use snus daily, occasionally or never?).

Multiple correspondence analysis

Multiple correspondence analysis (MCA) in the statistical program SPAD 7.3 was applied to encircle smoking habits and their connection to other lifestyle practices in Norway.

MCA is descriptive, in that it seeks to adapt the model to the structure of the observed data, not vice-versa, as is the case in causal statistics (Le Roux & Rouanet, 2010, p. 1-2). The technique has been described as a geometric variation of factor analysis. MCA presents the overall deviations for all response categories in factorial planes, which are expressed as intersecting axes in a multidimensional geometric space.

The appropriate procedure for determining the number of axes to interpret is based on the variance of the individual axes. *Modified rates in per cent* is an expression of explained variance, and the cumulated modified rates determines the number of axes to be interpreted. The rule of thumb is that about 80 % of the total variance is sufficient (Le Roux & Rouanet, 2010, p. 51-52).

To name the dimensions, one looks to the *absolute contribution of modality to axis variance*. The measure Ctr is an expression of this variance. The rule of thumb is to include every modality "whose contributions to axis exceed the average contribution" (Le Roux & Rouanet, 2010: 52).

In the following, I present analyses based on lifestyle indicators as active categories and social position as supplementary "explanatory" categories. This is also the strategy Bourdieu (1984, p. 261) used in *Distinction*.

Results

In 2007, over one third of the Norwegian population reported using some form of tobacco. 25 % smoked daily or occasionally, while 11 % used snus, possibly in combination with cigarettes (Table 1). In the population, non-smokers were a clear majority.

Among tobacco users cigarettes are the dominant tobacco product. 41 % of tobacco users smoke manufactured cigarettes, 21 % "mild" cigarettes, while 25 % smoke "roll-your-own", 8 % cigars and only 1% a pipe. 23 % of tobacco users use more than one type of product.

Construction of the space of lifestyles

The first MCA was conducted on all respondents. As the data are nationally representative, the space of lifestyles revealed can be understood as applying to the nation as a whole.

Table 2 shows the variance of the axes as identified by the MCA, and the modified rates, which underlies the considerations about the number of axes to include in the further analysis. The cumulated modified rate of Axes 1 and 2 is 77 % – i.e., close to the thumb rule of 80 %.

Modalities providing an above average contribution to the variance of axes are included in the interpretation of these two axes. The average is 100/197 = 0.51. Modalities with a contribution (ctr) higher than 0.51 on axis 1 or axis 2 are summarized in Figure 1 (for all statistical findings, see online supplementary material).

The first (horizontal) dimension is an expression of lifestyle differences in *levels of activity* (including domestic/social orientation) and *technology*. Here, the dimension distinguishes between a passive domestic lifestyle and little use of technology on the one hand, and an active social style and extensive use of technology on the other. To the left of axis 1, we find a collection of modalities that express a "passive" stance to the lifestyle practices studied here. To the right on axis 1, we find a collection of modalities to those on the left of the axis. In addition to widespread use of digital technology, we find indicators of an active social life, and food and drink consumed at places to go out for food and drinks or "en route". Snus use (also in combination with cigarettes) has its place here. The other modalities for tobacco use have little bearing on this axis.

The second (vertical) dimension is an expression of lifestyle differences related to *cultural consumption* and *health*. This is also the axis tobacco use especially contributes to. At the bottom of axis 2, we find an accumulation of modalities indicating little interest in highbrow culture and health ideals, but all the greater interest in entertainment on commercial

television channels, games, "fast food" – and tobacco. At the top of axis 2, we find the opposite: participation in cultured activities, use of serious media (Aftenposten), health ideals and an active non-tobacco stance.

These structural trends define the main contradictions in the Norwegian space of lifestyles. (As we will see later, they also express social patterns). In addition, we can identify four relatively distinct lifestyles, and their contents, by taking the four squares in the plot into consideration. The lifestyle encircled in the lower left quadrant can be described as *passive and entertainment oriented*. This is a lifestyle where participants have not been to a museum, a theatre or an art exhibition during the last year and where they have not stayed in a hotel for work assignments. If they travel abroad on holiday, they prefer package holiday to arranging and booking the trip themselves. They seldom exercise and never eat fruit as a snack. Their lack of interest in sporting activities is reflected in never shopping in the sports and wilderness chain store XXL. Their lifestyle is characterized by frequent television viewing, especially the commercial channels TV2 and TVNorge, and reading Se & Hør ("See and Hear", a tabloid magazine focussing on celebrities and gossip). This is a way of life where respondents think that foreign aid should be reduced, and that it is wrong to pass more restrictions on where smoking is allowed. Country & Western is a common taste in music. This is the space of lifestyle for daily smoking.

The lifestyle encircled in the upper left quadrant is also characterized by heavy media use, but of a different type than in the previous lifestyle. Here, the non-commercial television channels – NRK – are preferred, in contrast to the commercial channels. Participants do not like rock, but classical music. They use technology infrequently: they do not use search engines on the Internet, and they seldom use credit cards when shopping. Level of physical activity is low, but the health profile of the diet is clear: they eat breakfast every day and avoid both coke and crisps. This is also a tobacco-free segment in which smoking and snus use do not occur. We can call this lifestyle *passive and serious*.

The third lifestyle (top right) is characterized by a high level of physical activity and many resources. This lifestyle is positioned in diametrical opposition to the passive entertainment lifestyle and can be described as *active*. Here we find extensive participation in cultural activities (art exhibitions, the theatre, and cinema) and many signs of "good taste". Respondents like jazz and read Aftenposten daily. They often use train as a means of travel and often stay in hotels in relation to work. They prefer to arrange and book flights and holidays themselves. Several activities take place with others, whether exercise with friends/colleagues or dinner with friends. This lifestyle is characterized by frequent alcohol

use, including wine at restaurants, but also by physical activity, which may well be a typical summer holiday activity. This segment reads Fjell og Vidde ("Mountains and Plains", a niche magazine focussing on outdoor life in the versatile Norwegian nature) and sometimes shop at the XXL store, but seldom at 7-Eleven. Respondents often think that foreign aid should be maintained at current levels or increased. Tobacco users in this segment smoke occasionally ("social smoking" etc.).¹

The fourth way of life can be characterized as *youthful* (bottom right). In this segment, participants pay little attention to non-commercial television. Instead, they prefer niche magazines such as FHM (for young men), Cosmopolitan (for young women) or commercial national radio (P4). Online media are important too, which is reflected in daily use of search engines on the Internet and that Internet is the main source of news. They use credit cards in stores on a daily basis. Their diet is not distinctly healthy, and they often eat "fast food" from snack bars, 7-Eleven or as "take aways" and drink Cola and eat crisps. There is also a tendency that they have not eaten breakfast at all during the last week. But then this is a lifestyle where the view that "I am not concerned with being healthy and keeping myself in good shape" is more prevalent than in other lifestyles. Yet, football is a sports activity that many participate in. Taste in music is hip-hop/rap or rock. This segment seems willing to take risks, they are open to having tattoos on their body, and they admit that they sometimes drink a lot of alcohol to achieve more intense experiences. This is the snus users' lifestyle, both those who combine snus and cigarettes, and those who use snus only.

Homologies between lifestyles, tobacco use and social position

Figure 2 shows the plot of social positions that emerge when we project the distribution of socio-demographics, capital indicators and attachments to working life onto the already constructed lifestyle map. Background variables as supplementary points can be considered as structuring of the observed lifestyle structure.

The age variable positions itself along the first horizontal dimension in a systematic way, which means that the differences in levels of activity and use of technology also become an expression of low (right) versus high (left) age. The same applies to personal income, which stations quite systematically along the horizontal axis, as it extends from low to high when we move from left to right on the axis. The education variable too positions itself partially along the horizontal axis and then quite parallel to income. The same goes for parental education, indicating that educational capital is often passed down between the generations. In addition, this first dimension expresses an important contrast between those in

work (or about to enter the labour market) to the right, and those who are not working, either because they are retired, insured or married without own paid work to the left.

This indicates that the first lifestyle dimension identified – differences in level of activity and technology use – is also an expression of total amount of capital (i.e. economic plus cultural capital), as we go from left to right. The picture is not clear-cut though, since position variables also lie partially along the vertical dimension. In particular, this applies to the education variables, as lifestyle differences in cultural consumption and health orientation also can be understood as an expression of low (primary or secondary school) versus high (college or university) education in terms of respondents' own education – and between secondary and university levels in terms of parents' education. Thus, the second dimension distinguishes between the amount of cultural capital, as illustrated by number of books read last year being placed from the bottom (do not read books) to the top (more than 10 books).

In the case of axis 2, we do *not* find a clear contrast between high cultural capital and high economic capital, as Bourdieu has done in France, although axis 2 brings out a certain opposition between the cultural field and the economic field when looking at respondents' industry or sector affiliation. Axis 2 also expresses differences between the public and private sector. At the top, we find an accumulation of public sector employees (teaching/research, public administration and health/social services), while employees of commodity trade/shops, industry/handicraft and transport, more often employed in the private sector, are located at the bottom. In addition, this dimension expresses a social class-like contrast between officials and managers (top) and workers (bottom).

If we look at the positions prominent in the four squares, the lower left quadrant is characterized by low levels of education, relatively low income and social standing as insured or unemployed. Daily smokers was located here. The upper left quadrant, which was nonsmokers' "passive serious" lifestyle, is characterized by many being retired and thus elderly. The upper right quadrant is characterized by a considerable amount of economic and cultural capital: high education and income and position as officer, manager or self-employed. Parents often have university education. Occasional "social" smokers tend to be located here. Young respondents characterize the fourth and final segment. Status-wise, they are either in education (pupils/students) or they are workers/operators. This is the segment of snus users.

Oppositions in lifestyles in the social space of tobacco users

The following analysis is based on the same empirical model as above, but now with a selection of tobacco users only. In addition, other measures of tobacco consumption were applied, including which tobacco product is used (cf. Table 1).

This analysis shows that the lifestyle differences identified in the total population also structure the space of lifestyles among tobacco users. In addition, use of different tobacco products is placed in the different corners of the two dimensional space (see Figure 3; due to communication considerations, the other modalities are not presented here). In the corner of the passive-entertainment oriented lifestyle, we find smoking of rolling tobacco. Here we also find the highest tobacco consumption (measured in number of cigarettes), which may indicate that nicotine addiction is strong. In the corner of the passive-serious lifestyle, pipes and mild cigarettes are smoked, while in the space of the active lifestyle, occasional smoking – e.g. of cigars – is common. Finally, in the youthful lifestyle, snus prevails.

Looking at social position (not reproduced here), cultural capital (vertically) distinguishes less among the tobacco-using population than in the total population, while overall capital position is located even more clearly along the horizontal axis, which is an expression of relatively little capital (left) and then gradually more capital (to the right). Thus, a dividing line of status lies internally within the social space of tobacco users, where daily smoking (especially of rolling tobacco) on the left is associated with "low status", and occasional smoking (preferably of cigars) and snus use (right) are more likely to correlate with "high status".

Discussion

In adhering to Bourdieu's (1998:2) advice to apply his theory to other special cases of what is possible, this analysis has extracted various lifestyle areas as distinctive of different tobacco user groups. This in itself indicates that different tobacco products are consumed as part of different lifestyles in Norway, and that tobacco products are judged also in relation to the social contexts and lifestyles in which they occur. In other words, how tobacco is used and which products are consumed are defined in relation to each other. People who smoke "occasionally" are not a variation on the general category of daily smoker, but a *contrast*. Daily smokers differ from the average population and from occasional smokers along other lifestyle and social position variables than snus users do.

A significant proportion of *the group of daily smokers* is currently outside important social arenas and seems to be excluded from several typical tasks. The low income level, and the position as insured or outside the labour force, suggest that this group consists of many marginalized individuals, whose participation in social and cultural life (from this analysis' empirical model) seems limited to vicarious experiences through commercial TV channels and press. It is among Norwegian daily smokers that we find an accumulation of lifestyle practices often considered problematic in public health (little physical exercise, frequent television viewing, unhealthy dietary habits). This is a lifestyle centred on the home.

Snus users have a lifestyle characterized by many signs of youthfulness, such as technology competence and an active social life. As we have seen, snus users are placed higher on the axis of total capital in the total Norwegian population (which in particular is an expression of income and parental education), but lower on the axis of cultural capital and standing. The snus user group is also characterized by a certain polarization in social position between snus-using pupils/students (who have the potential to acquire more capital over time) and workers who use snus (who cannot be said to have the same potential).

The contemporary group of tobacco users who have the relatively highest status is *occasional smokers*. The lifestyle profile of occasional smokers lies close to the most prestigious lifestyle in Norway, and these tobacco users have more in common with those who do not smoke than daily smokers and snus users. The lifestyle profiles of daily smokers and snus users (especially those who combine snus with cigarettes) differ the most from the lifestyle profile of the average population, and therefore these profiles distinguish and separate daily smokers and snus users in the social space. This can also be seen from the various tobacco user groups' distance to the origo (see Figure 1).

Snus as distinctive to cigarettes

Traditionally, tobacco consumption has been a way for teenagers to express style and identity, and thus appear as something other than "grey and average". Cigarette smoking may still be filling this function among young people, even in a context of tobacco denormalisation, as many adolescents seem ready to "consume conspicuously" and take health risks to achieve status and influence among peers (Haines et al., 2008; Plumridge et al., 2002). In the international context, however, Norway, Sweden and USA are in a unique situation, due to snus being a legal tobacco product. In recent decades, we have observed a surge in the use of snus by Norwegian adolescents. Currently, more young people use snus than smoke on a daily basis (Pedersen & von Soest, 2014). Even if the snus wave has captured many of those who previously would have started smoking, the snus user group has characteristics that indicate that snus may also appeal to other groups than those who typically have been smokers, especially due to associations with sporting milieus (Nordby & Wood, 2008). Snus use can therefore serve as a distinction among young people, as the snus user lifestyle differs from both cigarette smokers and "neutral" non-smokers. Snus use constitutes a form of symbolic consumption in a youthful lifestyle, and the recent increase in snus use also among girls may indicate that snus is even more identity-defining than cigarettes among young people today. However, the "youthfulness" associated with snus users' lifestyle is not necessarily a separate form of capital in the national social space, although many of the distinctive signs of young lifestyles certainly may accord high status in certain situations, both in smaller sub-cultural youth groupings and the social space of all tobacco users. The fact that snus especially have been used by young men, with a lifestyle characterized by high technological competence and an active social life, links snus to social groups that may acquire more economic and cultural capital in the future. In short time, many of these will occupy more powerful positions in society than they are in today. If current snus users continue to use snus in the future, the group may also become more powerful status-wise. Another possibility is that the group will continue to be located in the middle-of-the-road status-wise, if snus users with the highest capital level stop using snus at an accelerated rate (as we have seen with smoking cessation).

Occasional versus daily smoking

Another distinction revealed in this study is associated with the financially strongest groups and their rejection of tobacco products as part of their lifestyle, which will also be the most prestigious. The affluent middle class has largely stopped smoking, and cigarettes are illsuited to lifestyles favouring self-control and health focus. Alternatively, the middle class may

engage in social smoking or smoking a cigar on special occasions. The exercise of symbolic power may precisely involve approval for a "beautifying" understanding that this would be a different and more legitimate way to use tobacco, not raising the same critical questions as daily smoking. Even occasional smoking of "rolling tobacco" now seems a marker of distinction among resourceful young adults in the big city (Tokle, 2010). There may be an element of cultural and political resistance associated with this form of smoking as well, while still being consistent with a self-understanding as autonomous non-smoker, in line with the health authorities' wish to end the tobacco problem (Katainen, 2010). This argument is substantiated by the occasional smokers' location close to non-smokers in the social space, rather than in an intermediate position *between* daily smokers and non-smokers.²

While people in the middle class often consider themselves and others in the light of health-oriented behaviour, this is not necessarily the case among people in the working class, who often look at health and the body as private matters and as marked by luck/bad luck (Lupton, 1995). Among those with the lowest total capital, smoking may have a different meaning than for middle class groups. Perhaps daily smoking of cigarettes for many serves as relaxation and pleasure in a relatively passive life, possibly affected by limited resources? This raises the question of whether daily smoking today may be an expression of what Bourdieu (1984, p. 372-396) has called "taste for necessity". The term refers to the restricted capacity among the least privileged to accumulate capital (including converting various forms of capital), which means that their taste often will be characterized by "what is necessary". While the middle and upper class increasingly have been able to accumulate capital, and thus develop distance to the taste of the purely necessary, this is not necessarily the case in the working class or among those outside the workforce (Blasius & Friedrichs, 2008). It is also possible that the dominant habitus in these groups means that many daily smokers fail (due to addiction) to quit smoking, or simply do not want to quit smoking, like the middle class and the relatively better-off largely have done. If daily smokers consider the cigarette an expression of relaxation and momentary pleasure, in accordance with the "taste for necessity", this will be difficult to justify in the current tobacco-hostile culture. This may also be a reason why many smokers perceive the authorities' anti-smoking campaigns as provocative (Factor et al, 2011). From the smokers' point of view, such campaigns can be perceived as promoting a lifestyle that deprives them of joy here and now. Maybe smoking for this group is a symbol of freedom and a way to express opposition to health and government regulation of lifestyle practices (Krange & Skogen, 2007)? As daily smoking overlaps with other lifestyle practices and tastes, such as musical tastes, this indicates that daily smoking not only is an expression

of social class and nicotine addiction, but also that the practice works as symbolic distinction (Pampel, 2006).

The analysis presented in this article can thus be read as an illustration of the social and symbolic distance between those who regulate and those who are regulated in the tobacco field, and tensions between marginalization and normality following in its wake. While the daily smoker group seems to move towards the fringes of society, occasional smoking is "safely" located at the societal centre. Snus use comes, with quite considerable force, from "below", among the young. If we imagine that tobacco use not only is an expression of addiction, but also of autonomy and possible resistance to the denormalization of tobacco use, the relationship between resistance and tobacco-related lifestyles is likely to vary. Among daily smokers it may involve rejection of expert health orientation (Krange & Skogen, 2007), among occasional smokers a playful balancing of risk and pleasure is implicated (Krange & Pedersen, 2001; Tokle, 2010), while among snus users it may work in line with the well-documented youthful quest for identity, influence and acceptance of peers through the practice of health risk behaviours.

The analysis of the internal distinctions within the space of tobacco users confirms that the use of different products and the different ways of consuming them, vary with social position and cultural capital, largely in line with historical stereotypes of typical pipe, cigar and cigarette smokers known from adverts and popular culture.

Methodological limitations

In the spirit of Bourdieu, I have looked for principles of differentiation in Norway 2007 – prior to the financial crisis – and used multiple correspondence analysis to identify structures and oppositions in the structures. Now the data set is arguably of less current interest, and the technology measures especially may be outmoded. However, we would probably have seen the same overall pattern if we had substituted varieties that are more recent for our technology measures, for instance, possession of smart telephones.

It is a weakness of multiple correspondence analysis that the statistical correlations between modalities are not tested for significance in the traditional sense. Nevertheless, if the sample is taken to be representative of the Norwegian population – and we have no evidence of systematic selection effects (Hellevik, 2008, p. 132-136) – the analyses of the Norwegian social space have revealed what are most likely real and effective underlying structures in lifestyle and social position. However, although Norway, compared to many other countries, is relatively homogeneous in terms of prosperity, the study may have underrepresented the

most marginalised smokers (people in prisons, institutions etc.) who are not easily recruited by this way of sampling data. Caution is also advised before generalizing these findings to other social contexts. While Norwegian smoking laws are comparable to those of the UK, USA and Australia, I would urge researchers in other countries to heed Bourdieu's advice and conduct similar analyses.

Conclusion

Various smoking practices enable different categories and forms of understanding, which means that different smoking groups are considered different, as expressing different forms of *habitus*. Because different *habitus* function as distinguishing and separating signs, and because these signs also express real social distances, the lifestyle differences identified in the analyses become "distinction differences" in the social space. Thus, it seems reasonable to conclude that tobacco use is a mechanism of social differentiation, in the sense that tobacco use is a distinguishing sign of more extensive lifestyle differences and status differences in today's Norway.

References

Blasius, J., & Friedrichs, J. (2008). Lifestyles in distressed neighborhoods. A test of Bourdieu's 'taste of necessity' hypothesis. *Poetics*, 36(1), 24-44.

Bourdieu, P. (1984). *Distinction. A Social Critique of the Judgement of Taste*. London: Routledge & Kegan Paul.

Bourdieu, P. (1998). Practical reason. On the theory of action. Cambridge: Polity Press.

Brandt, A. M. (2007). *The Cigarette Century. The Rise, Fall and the Deadly Persistence of the Product that Defined America.* New York: Basic Books.

Callison, C., Karrh, J. A., & Zillmann, D. (2002). The aura of tobacco smoke: Cigars and cigarettes as image makers. *Journal of Applied Social Psychology*, 32(7), 1329-1343.

Chapman, S., & Freeman, B. (2008). Markers of the denormalization of smokers and the tobacco industry. *Tobacco Control*, *17*(1), 25-31.

Erceg-Hurn, D. M., & Steed, L. G. (2011). Does exposure to cigarette health warnings elicit psychological reactance in smokers? *Journal of Applied Social Psychology*, 41(1), 219-237.

Factor, R., Kawachi, I., & Williams, D. R. (2011). Understanding high-risk behaviour among non-dominant minorities: A social resistance framework. *Social Science & Medicine*, 73(9), 1292-1301.

Frohlich, K., Corin, E., & Potvin, L. (2001). A Theoretical Proposal for the Relationship between Context and Disease. *Sociology of Health and Illness*, 23(6), 776–797.

Gately, I. (2001). *La Diva Nicotina. The Story of How Tobacco Seduced the World*. London: Scribner.

Graham, H. (2012). Smoking, stigma and social class. Journal of Social Policy, 41(1), 83-99.

Haines, R. J., Poland, B. B., & Johnson, J. L. (2008). Becoming a 'real' smoker: Cultural capital in young women's account of smoking and other substance use. *Sociology of Health and Illness*, *31*(1), 66–80.

Hellevik, O. (2008). *Jakten på den norske lykken. Norsk Monitor 1985–2007* [in Norwegian]. Oslo: Universitetsforlaget.

Katainen, A. (2010). Social class differences in the accounts of smoking – striving for distinction. *Sociology of Health and Illness, 32*(7), 1087–1101.

Klein, R. (1995) Cigarettes are sublime. Durham, NC: Duke University Press.

Krange, O., & Pedersen, W. (2001). Return of the Marlboro Man? Recreational smoking among young Norwegian adults. *Journal of Youth Studies*, *4*(2), 155–174.

Krange, O., & Skogen, K. (2007). Kodebok for den intellektuelle middelklassen [in Norwegian]. *Nytt Norsk Tidsskrift*, 24(3), 227–242.

Le Roux, B., & Rouanet, H. (2010). *Multiple Correspondence Analysis*. Thousand Oaks CA: Sage.

Lupton, D. (1995). *The Imperative of Health. Public Health and the Regulated Body*. London: Sage.

Lund, M., & Lindbak, R. (2007). *Norwegian Tobacco Statistics* 1973-2006 (SIRUS Skrifter No. 3/2007). Retrieved from Norwegian Institute of Alcohol and Drug Research (SIRUS): http://wpstatic.idium.no/www.sirus.no/2015/01/sirusskrifter3.07.pdf.

Nordby, K., & Wood, R. T. A. (2008). A Grounded Theory of snuff-dipping behavior (use of Swedish 'Snus') in a Norwegian population. *Addiction Research and Theory*, *16*(1), 5–22.

Pampel, F. C. (2006). Socioeconomic distinction, cultural tastes, and cigarette smoking. *Social Science Quarterly*, 87(1), 19–35.

Pedersen, W., & van Soest, T. (2014) .Tobacco use among Norwegian adolescents: from cigarettes to snus. *Addiction*, *109*(7), 1154-1162.

Plumridge, E. W., Fitzgerald, L. J., & Abel, G. M. (2002). Performing coolness: Smoking refusal and adolescent identities. *Health Education Research*, *17*(2), 167–179.

Poland, B. D., Frohlich, K., & Haines, R. J. (2006). The social context of smoking: The next frontier in tobacco control? *Tobacco Control*, *15*(1), 59–63.

Scheffels, J. (2008). A difference which makes a difference: Young adult smokers' accounts of cigarette brands and package design. *Tobacco Control*, *17*(2), 118–122.

Scheffels, J. (2009). Stigma, or sort of cool? Young adults' accounts of smoking and identity. *European Journal of Cultural Studies*, 12(4), 469-486.

Stuber, J., Galea, S., & Link, B. G. (2008). Smoking and the Emergence of a Stigmatized Social Status. *Social Science and Medicine*, 67(3), 420–430.

Tokle, R. (2010) Å røyke uten å være røyker. Av-og-til-røykeres fortellinger om å røyke [in Norwegian]. Master thesis in sociology. University of Oslo.

Veenstra, G. (2007). Social space, social class and Bourdieu: Health inequalities in British Columbia, Canada. *Health & Place*, 13(1), 14-31.

Wiium, N., Aarø, L. E., & Hetland, J. (2009). Subjective attractiveness and perceived trendiness in smoking and snus use: A study among young Norwegians. *Health Education Research*, *24*(1), 162–172.

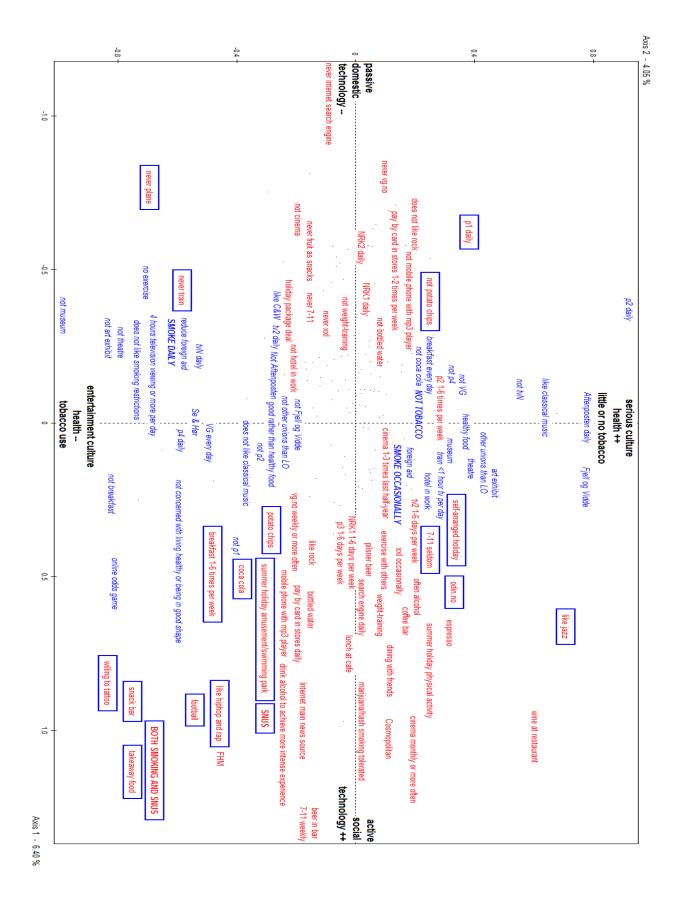
Table 1. Different user groups of tobacco 2007, in per cent of total population and the population of tobacco users

| | % of total population | % of the population of tobacco users |
|--|------------------------|--------------------------------------|
| Tobacco use | | |
| Do not use tobacco | 64 | [-] |
| Daily smoking | 18 | 51 |
| Occasional smoking | 7 | 20 |
| Snus daily or occasionally | 6 | 16 |
| Combine smoking and snus | 5 | 14 |
| Total | 100 | 100 |
| N | (3775) | (1361) |
| | | |
| Product preference (multiple rest | oonses) | |
| Product preference (multiple resp Smoke cigar | | 8 |
| Smoke cigar | ponses) 3 1 | 8 1 |
| Product preference (multiple resp Smoke cigar Smoke pipe Smoke RYO tobacco | 3 | |
| Smoke cigar Smoke pipe Smoke RYO tobacco | 3 1 | 1 |
| Smoke cigar Smoke pipe Smoke RYO tobacco Smoke mild cigarettes | 3 1 9 | 1 25 |
| Smoke cigar Smoke pipe | 3 1 9 8 | 1 25 21 |
| Smoke cigar Smoke pipe Smoke RYO tobacco Smoke mild cigarettes Smoke manufactured cigarettes | 3 1 9 8 15 | 1 25 21 41 |

Table 2. Multiple correspondence analysis. Variance of axes, including modified and cumulated rates

| | Axis 1 | Axis 2 | Axis 3 |
|-------------------------------|--------|--------|--------|
| Eigenvalue (variance of axis) | 0.0876 | 0.0555 | 0.0387 |
| Per cent | 6.40 | 4.05 | 2.82 |
| Cumulated per cent | 6.40 | 10.45 | 13.27 |
| Modified rate | 58 % | 19 % | 7 % |
| Cumulated modified rate | 58 % | 77 % | 84 % |

Figure 1. Space of lifestyles in the total population 2007. Includes modalities with contributions above average to axis 1, axis 2 (in italics) and both 1 and 2 (in frames). Modalities for tobacco consumption in capitals



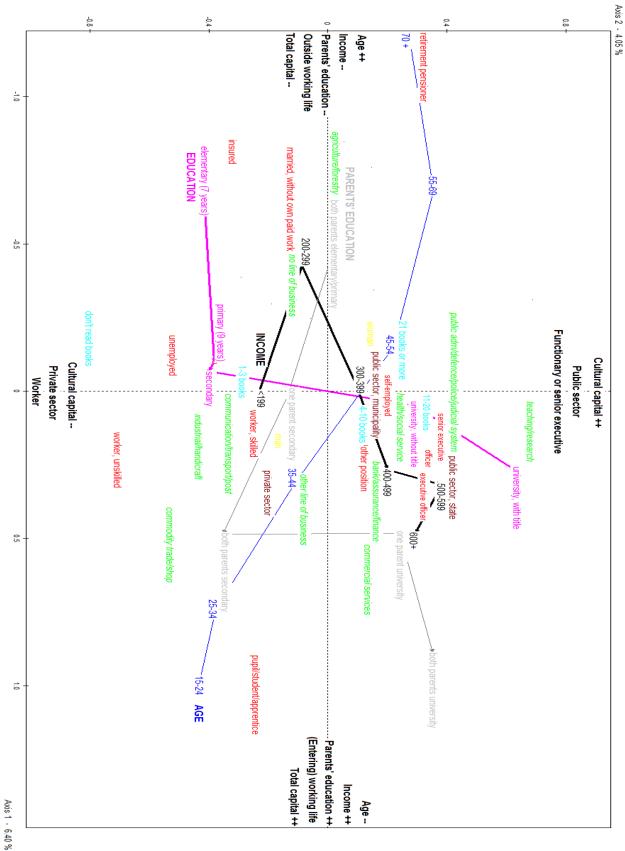


Figure 2. Space of social positions. Supplementary variables (with trajectories for age, income, education and parental education), in total population 2007

Figure 3. Space of lifestyles for tobacco user population 2007. Includes modalities for smoking and use of snus, with contribution over average to axis 1, axis 2 (in italics) and both 1 and 2 (in frames). (Modalities in parentheses do not contribute above average but are still presented due to relevance for the problem)

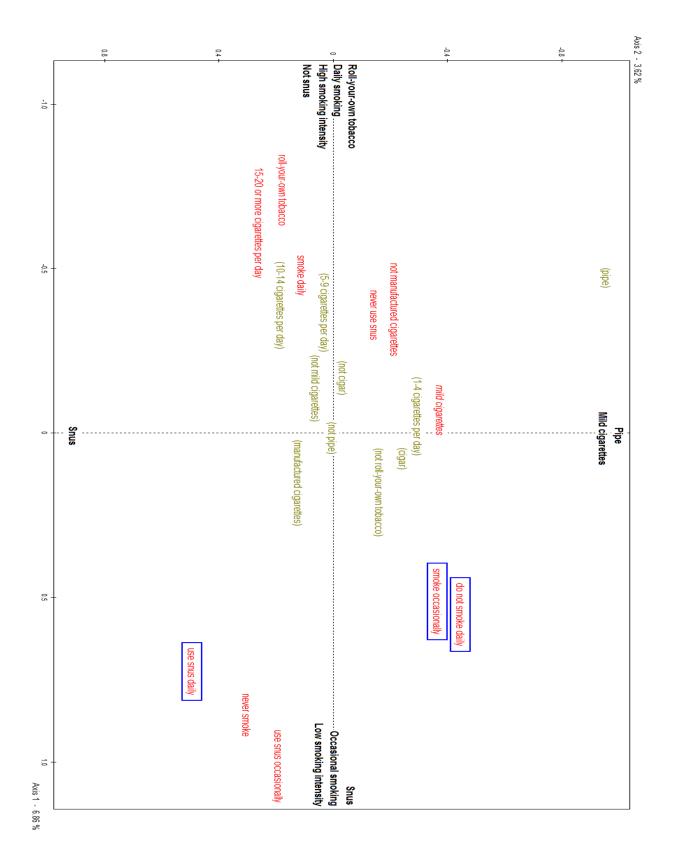


TABLE A1. Multiple correspondence analysis. Coordinates and absolute contribution (ctr) of active modalities on the first two axes (N=3 775).

| Lifestyle Area | Modalities | % | Axis 1 Coor- dinate | Axis 1 Ctr | Axis 2 Coor- dinate | Axis 2 ctr |
|--|---|-------------------------|--|--|---|---|
| Tobacco use | does not use tobacco smoke daily smoke occasionally use snus combine smoking and snus | 64 18 7 6 5 | -0.10 -0.34 0.25 0.93 1.10 | 0.08 0.29 0.06 0.66 0.81 | 0.23 -0.59 0.15 -0.29 -0.71 | 0.72 1.34 0.03 0.10 0.53 |
| Media use Cinema (last 6 months) | cinema monthly or more often cinema 1-3 times not cinema no info | 13 46 40 1 | 1.01 0.29 -0.64 | 1.76 0.53 2.26 | 0.19 0.11 -0.18 | 0.10 0.11 0.29 |
| Television channels (last seven days) | NRK1 daily NRK1 1-6 days not NRK1 no info | 51 43 4 3 | -0.42 0.48 0.44 | 1.22 1.31 0.14 | 0.04 -0.02 -0.27 | 0.02 0.00 0.06 |
| | NRK2 daily NRK2 1-6 days not NRK2 no info | 16 51 23 10 | -0.55 0.15 0.18 | 0.65 0.15 0.10 | 0.02 0.06 -0.13 | 0.00 0.04 0.09 |
| | TV2 daily TV2 1-6 days not TV2 no info | 47 43 5 5 | -0.26 0.31 -0.03 | 0.42 0.58 0.00 | -0.26 0.21 0.68 | 0.70 0.42 0.45 |
| | TVNorge daily TVNorge 1-6 days not TVNorge no info | 18 55 17 10 | -0.19 0.17 -0.10 | 0.09 0.21 0.03 | -0.52 -0.04 0.56 | 1.03 0.01 1.12 |
| Television viewing yesterday | more than 4 hours tv viewing 2-4 hours tv viewing less than 1 hour tv viewing no info | 9 60 28 2 | -0.28 -0.05 0.23 | 0.10 0.02 0.20 | -0.69 -0.03 0.30 | 0.93 0.01 0.53 |
| Daily newspapers (last 6 days, i.e. monday-saturday) | Aftenposten all days Aftenposten 1-5 days not Aftenposten no info | 14 22 60 3 | 0.04 0.36 -0.12 | 0.00 0.40 0.12 | 0.79 0.28 -0.27 | 1.88 0.37 0.96 |
| | Dagbladet all days Dagbladet 1-5 days not Dagbladet no info | 4 52 40 3 | 0.36 0.19 -0.24 | 0.08 0.24 0.32 | -0.08 0.05 -0.04 | 0.01 0.03 0.01 |
| | VG all days VG 1-5 days not VG no info | 11 56 30 3 | 0.02 0.07 -0.10 | 0.00 0.04 0.04 | -0.50 -0.08 0.35 | 0.60 0.08 0.78 |
| Radio stations (last 7 days) | P1 daily P1 1-6 days not P1 no info | 32 36 30 2 | -0.62 0.21 0.42 | 1.63 0.22 0.71 | 0.38 0.02 -0.40 | 0.97 0.00 1.04 |

| | P2 daily P2 1-6 days not P2 no info | 8 33 53 5 | -0.37 0.02 0.10 | 0.15 0.00 0.07 | 0.93 0.28 -0.29 | 1.45 0.55 0.99 |
|--|---|--|---|--|--|--|
| | P3 daily P3 1-6 days not P3 no info | 4 33 56 7 | 0.23 0.39 -0.17 | 0.03 0.69 0.23 | 0.00 -0.04 0.02 | $0.00 \\ 0.01 \\ 0.00$ |
| | P4 daily P4 1-6 days not P4 no info | 12 39 42 7 | 0.06 0.24 -0.15 | 0.01 0.30 0.13 | -0.58 -0.16 0.29 | 0.85 0.21 0.77 |
| Magazines read | Se og Hør last week Se og Hør more than 8 days ago never Se og Hør no info | 19 54 21 6 | 0.01 0.14 -0.23 | 0.00 0.13 0.15 | -0.55 0.11 0.19 | 1.22 0.14 0.17 |
| | >1 of last 6 issues of Fjell & vidde not any of last 6 issues of Fjell & vidde no info | 21 72 7 | 0.21 -0.01 | 0.12 0.00 | 0.78 -0.21 | 2.72 0.68 |
| | >1 of last 6 issues of FHM not any of last 6 issues of FHM no info | 13 78 7 | 1.07 -0.15 | 2.31 0.24 | -0.46 0.08 | 0.66 0.11 |
| | >1 of last 6 issues of Cosmopolitan not any of last 6 issues Cosmopolitan no info | 13 80 7 | 0.97 -0.11 | 1.69 0.13 | 0.11 -0.02 | 0.03 0.01 |
| Digital/mobile technology | have used odin.no [public information] have not used used odin.no no info | 25 71 3 | 0.50 -0.15 | 0.88 0.21 | 0.31 -0.12 | 0.53 0.21 |
| | vg.no weekly or more often vg.no less than weekly never vg.no no info | 46 23 29 3 | 0.46 0.15 -0.78 | 1.30 0.07 2.33 | -0.22 0.30 0.10 | 0.46 0.43 0.06 |
| | cell phone with mp3 in household not cell phone with mp3 in household | 46 54 | 0.60 -0.51 | 2.23 1.89 | -0.23 0.19 | 0.50 0.43 |
| | internet search engine daily internet search engine less than daily never internet search engine no info | 41 40 17 3 | 0.51 0.00 -1.17 | 1.46 0.00 3.07 | 0.01 0.03 -0.08 | $0.00 \\ 0.01 \\ 0.02$ |
| | pay by card in stores daily pay by cards in stores 3-5 times a week pay by card in stores 1-2 times a week never pay by card in stores no info | 22 39 31 5 3 | 0.61 0.16 -0.48 -0.75 | 1.14 0.14 0.97 0.41 | -0.18 0.05 0.14 -0.30 | 0.16 0.02 0.13 0.10 |
| Media interest Music genre preferences | like C & W do not like C & W like classical music do not like classical music like modern jazz do not like modern jazz like rock do not like rock like hip hop/rap do not like hip hop/rap | 41 59 35 65 10 90 45 55 16 84 | $\begin{array}{c} -0.29\\ 0.20\\ -0.10\\ 0.05\\ 0.67\\ -0.08\\ 0.46\\ -0.57\\ 1.02\\ -0.20\\ \end{array}$ | 0.47 0.33 0.05 0.02 0.62 0.07 1.59 1.98 2.28 0.44 | $\begin{array}{c} -0.25\\ 0.17\\ 0.64\\ -0.35\\ 0.70\\ -0.08\\ -0.16\\ 0.20\\ -0.47\\ 0.09\end{array}$ | 0.53 0.37 3.15 1.73 1.09 0.12 0.31 0.39 0.76 0.15 |

| News source | tv most important news source | 37 | -0.16 | 0.13 | -0.24 | 0.46 |
|-------------------|--|----------|---------------|---------------------|-------|------|
| | tv not most important news source | 61 | 0.11 | 0.10 | 0.15 | 0.30 |
| | no info | 2 | | | | |
| | internet most important news source | 19 | 0.90 | 2.05 | -0.19 | 0.15 |
| | internet not most important news source | 79 | -0.20 | 0.43 | 0.05 | 0.04 |
| | no info | 2 | 0.20 | 0.15 | 0.02 | 0.01 |
| | | | | | | |
| Physical activity | exercise daily | 5 | 0.03 | 0.00 | 0.12 | 0.02 |
| | exercise several times a week | 53 | 0.10 | 0.08 | 0.19 | 0.43 |
| | exercise weekly | 33 | -0.05 | 0.01 | -0.14 | 0.15 |
| | exercise less than weekly or never | 9 | -0.46 | 0.26 | -0.70 | 0.95 |
| | | 25 | 0.41 | | 0.00 | 0.07 |
| | exercised with friends/others last year | 35 65 | 0.41 -0.22 | 0.79 0.42 | 0.09 | 0.06 |
| | not exercised with others last year | 03 | -0.22 | 0.42 | -0.05 | 0.03 |
| | weight-traning at least once a month | 28 | 0.63 | 1.48 | 0.08 | 0.04 |
| | weight-training less than monthly or never | 20 72 | -0.24 | 0.57 | -0.03 | 0.02 |
| | | | 0.2 | 0107 | 0.02 | 0.02 |
| | football at least once a month | 11 | 0.93 | 1.24 | -0.54 | 0.65 |
| | football less than monthly or never | 89 | -0.11 | 0.15 | 0.06 | 0.08 |
| | | | | | | |
| - | | | | 0.45 | o • - | · |
| Eating- and | breakfast every day last week breakfast 1-6 times last week | 67 28 | -0.21 | 0.38 | 0.25 | 0.88 |
| drinking habits | not breakfast last week | 28 4 | 0.47 | 0.83 0.03 | -0.48 | 1.39 |
| | no info | 4 | 0.23 | 0.05 | -0.82 | 0.53 |
| | | 2 | | | | |
| | filter/brew coffee daily | 49 | -0.25 | 0.42 | 0.05 | 0.02 |
| | filter/brew coffee less than daily or never | 49 | 0.27 | 0.48 | -0.05 | 0.03 |
| | no info | 2 | | | | |
| | | | | | | |
| | fruit as snacks monthly or more often | 75 | 0.15 | 0.23 | 0.05 | 0.03 |
| | never fruit as snacks | 23 | -0.47 | 0.69 | -0.16 | 0.12 |
| | no info | 2 | | | | |
| | dinner with friends regularly | 7 | 0.84 | 0.70 | 0.11 | 0.02 |
| | dinner with friends sometimes or more rarely | 91 | -0.06 | 0.05 | -0.01 | 0.02 |
| | no info | 2 | -0.00 | 0.05 | -0.01 | 0.00 |
| | no mio | 2 | | | | |
| | lunch at cafe 2-3 times a month or more | 12 | 0.73 | 0.85 | -0.01 | 0.00 |
| | lunch at cafe less often [than 2-3] or never | 85 | -0.09 | 0.09 | 0.00 | 0.00 |
| | no info | 3 | | | | |
| | | | | | | |
| | fast food meal 2-3 times a month or more | 16 | 0.90 | 1.82 | -0.75 | 1.96 |
| | fast food meal less often or never no info | 81 3 | -0.17 | 0.31 | 0.15 | 0.42 |
| | | 3 | | | | |
| | takeaway food at home 2-3 a month or more | 9 | 1.12 | 1.53 | -0.75 | 1.08 |
| | takeaway food at home less often or never | 89 | -0.10 | 0.13 | 0.08 | 0.11 |
| | no info | 2 | | | | |
| | | | | | | |
| | coffee shop 2-3 times a month or more | 18 | 0.65 | 1.07 | 0.17 | 0.11 |
| | coffe shop less often or never | 79 | -0.14 | 0.21 | -0.03 | 0.02 |
| | no info | 2 | | | | |
| | potato crisps/chips 2-3 times a month or more | 45 | 0.40 | 0.98 | -0.28 | 0.77 |
| | potato crisps/chips 2-5 times a month of more potato crisps/chips less often or never | 43 53 | -0.34 | 0.98 | 0.28 | 0.77 |
| | no info | 2 | -0.54 | 0.00 | 0.23 | 0.04 |
| | | - | | | | |
| | buy bottled water 2-3 times a month or more | 32 | 0.61 | 1.61 | -0.16 | 0.18 |
| | buy bottled water less often or never | 66 | -0.28 | 0.71 | 0.07 | 0.08 |
| | no info | 2 | | | | |
| | | | 0.57 | | | · ·- |
| | espresso or similar 2-3 time a month or more | 23 | 0.64 | 1.28 | 0.31 | 0.47 |
| | espresso or similar less often or never | 75 3 | -0.19 | 0.36 | -0.10 | 0.15 |
| | no info | 3 | | | | |
| | | | | | | |

| | coca cola 2-3 times a month or more | 24 | 0.45 | 0.66 | -0.36 | 0.66 |
|---------------------|--|----------|-------|------|-------|------|
| | coca cola less often or never | 67 | -0.19 | 0.34 | 0.23 | 0.74 |
| | no info | 9 | -0.17 | 0.54 | 0.25 | 0.74 |
| | | 7 | | | | |
| Alcohol | beer 2-3 times a month or more | 36 | 0.40 | 0.80 | 0.05 | 0.02 |
| Alcohol | | | | | | |
| | beer less often or never | 62 | -0.22 | 0.41 | -0.03 | 0.01 |
| | no info | 2 | | | | |
| | | | | | 0.00 | |
| | spirits 2-3 times a month or more | 15 | 0.28 | 0.16 | 0.00 | 0.00 |
| | spirits less often or never | 82 | -0.04 | 0.02 | 0.00 | 0.00 |
| | no info | 2 | | | | |
| | | | | | | |
| | beer in bar/pub 2-3 times a month or more | 8 | 1.35 | 1.94 | -0.16 | 0.04 |
| | beer in bar/pub less often or never | 90 | -0.11 | 0.15 | 0.01 | 0.00 |
| | no info | 2 | | | | |
| | | | | | | |
| | wine at restaurant 2-3 times a month or more | 4 | 1.02 | 0.51 | 0.60 | 0.28 |
| | wine at restaurant less often or never | 94 | -0.04 | 0.02 | -0.02 | 0.01 |
| | no info | 2 | | | | |
| | | | | | | |
| | drink alcohol often | 20 | 0.45 | 0.55 | 0.24 | 0.24 |
| | drink alcohol occasionally/seldom/never | 79 | -0.11 | 0.12 | -0.06 | 0.06 |
| | no info | 1 | | | | |
| | | - | | | | |
| | | | | | | |
| Travel- and holiday | not travelled by train in Norway last year | 29 | -0.37 | 0.54 | -0.59 | 2.15 |
| habits | travelled by train in Norway last year | 69 | 0.16 | 0.25 | 0.25 | 0.90 |
| nuono | no info | 2 | 0.10 | 0.25 | 0.25 | 0.90 |
| | no mio | - | | | | |
| | not travelled by plane last year | 12 | -0.78 | 0.99 | -0.69 | 1.22 |
| | travelled by plane last year | 87 | 0.12 | 0.17 | 0.10 | 0.18 |
| | no info | 1 | 0.12 | 0.17 | 0.10 | 0.10 |
| | | 1 | | | | |
| Tasks last summer | welling tour | 42 | 0.19 | 0.21 | 0.23 | 0.47 |
| | walking tour | 42 58 | -0.14 | 0.21 | -0.16 | |
| holiday | not walking tour | | | | | 0.34 |
| | fly/spinning rod fishing | 22 | 0.36 | 0.39 | -0.21 | 0.20 |
| | not fly/spinning rod fishing | 78 | -0.10 | 0.11 | 0.06 | 0.06 |
| | fished with a line from a boat | 30 | 0.26 | 0.27 | -0.07 | 0.03 |
| | not fished with a line from a boat | 70 | -0.11 | 0.11 | 0.03 | 0.01 |
| | amusement/swimming/leisure park | 27 | 0.54 | 1.07 | -0.29 | 0.48 |
| | not amusement/swimming/leisure park | 73 | -0.20 | 0.40 | 0.11 | 0.18 |
| | physical activity | 23 | 0.68 | 1.45 | 0.24 | 0.28 |
| | not physical activity | 77 | -0.21 | 0.44 | -0.07 | 0.09 |
| | | | | | | |
| | dispose a cottage | 39 | 0.04 | 0.01 | 0.21 | 0.37 |
| | do not dispose a cottage | 61 | -0.02 | 0.00 | -0.13 | 0.23 |
| | | | | | | |
| | prefer to self-arrange holiday abroad | 41 | 0.40 | 0.89 | 0.31 | 0.61 |
| | prefer vacation with package | 58 | -0.27 | 0.59 | -0.22 | 0.87 |
| | no info | 1 | | | | |
| | | | | | | |
| | stayed in hotels in rel. to work last year | 46 | 0.28 | 0.49 | 0.24 | 0.56 |
| | not stayed in hotels in rel. to work last year | 51 | -0.23 | 0.36 | -0.22 | 0.55 |
| | no info | 2 | | | | |
| | | | | | | |
| Consumption | border trade in Sweden > 10 t. last year | 5 | 0.09 | 0.00 | -0.65 | 0.41 |
| patterns | border trade in Sweden 1-9 t. last year | 55 | 0.14 | 0.15 | -0.04 | 0.02 |
| | not border trade in Sweden last year | 37 | -0.19 | 0.18 | 0.16 | 0.19 |
| | no info | 4 | | | | |
| | | | | | | |
| | often shop at Elkjøp [electronics] | 7 | 0.49 | 0.23 | -0.31 | 0.14 |
| | occasionally shop at Elkjøp | 84 | 0.01 | 0.00 | 0.02 | 0.01 |
| | never shop at Elkjøp | 6 | -0.52 | 0.22 | -0.05 | 0.00 |
| | no info | 3 | | - | | |
| | - | - | | | | |

| | often shop at Cubus [clothes] | 6 | 0.19 | 0.03 | -0.48 | 0.31 |
|------------------------|---|----------|-------|-------|---------------|------|
| | occasionally shop at Cubus | 71 | -0.05 | 0.03 | 0.03 | 0.02 |
| | never shop at Cubus | 20 | 0.21 | 0.12 | 0.01 | 0.00 |
| | no info | 3 | | | | |
| | | 5 | | | | |
| | often shop at XXL [sports/wilds] | 3 | 0.97 | 0.40 | -0.04 | 0.00 |
| | occasionally shop at XXL | 39 | 0.41 | 0.88 | 0.14 | 0.16 |
| | never shop at XXL | 54 | -0.32 | 0.74 | -0.11 | 0.14 |
| | no info | 3 | 0.32 | 0.74 | 0.11 | 0.14 |
| | | 5 | | | | |
| | shop weekly at 7-Eleven | 8 | 1.36 | 1.22 | -0.17 | 0.26 |
| | shop less than weekly at 7-Eleven | 37 | 0.34 | 0.57 | 0.26 | 0.51 |
| | never shop at 7-Eleven | 54 | -0.41 | 1.89 | -0.15 | 0.05 |
| | no info | 2 | 0.11 | 1.02 | 0.12 | 0.05 |
| | | - | | | | |
| Other activities | | | | | | |
| Gaming (last three | played the odds game online | 8 | 0.52 | 0.29 | -0.81 | 1.11 |
| months) | not played the odds game online | 88 | -0.02 | 0.00 | 0.08 | 0.12 |
| | no info | 4 | | | | |
| | | | | | | |
| | played Lotto | 52 | -0.17 | -0.17 | -0.16 | 0.30 |
| | not played Lotto | 46 | 0.21 | 0.19 | 0.22 | 0.34 |
| | no info | 2 | | | | |
| | | | | | | |
| | played scratch cards | 21 | -0.30 | 0.26 | 0.16 | 0.11 |
| | not played scratch cards | 75 | 0.11 | 0.12 | -0.04 | 0.02 |
| | no info | 3 | | | | |
| | | | | | | |
| Overtime | work overtime 3 nights or more per week | 10 | 0.59 | 0.46 | -0.14 | 0.04 |
| | rarely or never work overtime | 89 | -0.06 | 0.04 | 0.01 | 0.00 |
| | no info | 2 | | | | |
| | | | | | | |
| Cultural participation | not been to a museum last year | 22 | -0.35 | 0.37 | -1.00 | 4.73 |
| | been to a museum last year | 76 | 0.11 | 0.12 | 0.29 | 1.38 |
| | no info | 2 | | | | |
| | | | | | | |
| | not been to the theater last year | 33 | -0.25 | 0.29 | -0.79 | 4.39 |
| | been to the theater last year | 65 | 0.14 | 0.18 | 0.40 | 2.27 |
| | no info | 2 | | | | |
| | | | | | 0.00 | |
| | not been to an exhibition last | 36 | -0.25 | 0.31 | -0.82 | 5.07 |
| | been to an exhibition last year | 62 | 0.15 | 0.20 | 0.47 | 2.90 |
| | no info | 2 | | | | |
| | | 0.1 | 0.22 | 0.20 | 0.05 | 0.00 |
| Trade union | LO member | 21 | -0.32 | 0.30 | -0.25 | 0.28 |
| membership | not LO member | 79 24 | 0.09 | 0.08 | 0.07 | 0.07 |
| | unionized in different organization than LO | 34 | 0.04 | 0.01 | 0.44 | 1.41 |
| | not a member of a different union than LO | 66 | -0.02 | 0.00 | -0.23 | 0.73 |
| Attitudes and values | willing to make tattoo on parts of the body | 11 | 0.82 | 0.97 | -0.83 | 1.58 |
| Attitudes and values | not willing/perhaps willing to make tattoo | 88 | -0.09 | 0.97 | -0.83 0.10 | 0.20 |
| | no info | 00 1 | -0.09 | 0.11 | 0.10 | 0.20 |
| | | 1 | | | | |
| | keen to live healthy and stay in good shape | 86 | -0.02 | 0.01 | 0.09 | 0.16 |
| | not keen to live healthy stay in good shape | 13 | 0.22 | 0.08 | -0.59 | 0.95 |
| | no info | 15 | 0.22 | 0.00 | -0.57 | 0.75 |
| | | 1 | | | | |
| (affirmative="fully or | prefer to buy brands even if they cost more | 59 | 0.14 | 0.15 | 0.12 | 0.17 |
| partially" agree) | prefer not to buy brands | 40 | -0.20 | 0.21 | -0.17 | 0.25 |
| partially agree | no info | 40 | 0.20 | 5.21 | 0.17 | 0.25 |
| (disputed="totally or | | - | | | | |
| partially" disagree) | occasionally drink alcohol to get more | | | | | |
| 1) | intense sensations | 17 | 0.79 | 1.43 | -0.24 | 0.21 |
| | do not occasionally drink alcohol to get | | | | | |
| | more intense sensations | 81 | -0.16 | 0.28 | 0.05 | 0.05 |
| | no info | 2 | - | | | |
| | | | | | | |

| choose food that tastes good rather than healthy food do not choose food that tastes good rather than healthy food no info | 56 43 2 | 0.00 0.02 | 0.00 0.00 | -0.25 0.36 | 0.79 1.13 |
|--|---------------|---------------|---------------------|---------------|------------------|
| smoking of hashish or marijuana can be accepted (under any doubt) smoking of hashish or marijuana cannot be accepted no info | 13 85 2 | 0.87 -0.19 | 1.87 0.40 | 0.02 0.00 | 0.00 0.00 |
| dislike more smoking restrictions like more smoking restrictions/unconcerned no info | 19 80 2 | -0.22 0.05 | 0.12 0.03 | -0.75 0.16 | 2.13 0.46 |
| keep or increase current level of foreign aid reduce current level of foreign aid no info | 73 26 2 | 0.11 -0.33 | 0.13 0.35 | 0.19 -0.59 | 0.55 1.75 |
| money in the household is not enough money is sufficient (possibly using savings) no info | 8 90 2 | -0.08 0.02 | 0.01 0.00 | -0.37 0.04 | 0.25 0.03 |

TABLE A2. Multiple correspondence analysis. Frequencies and coordinates for the supplementary points (N=3 775).

| Variables | Modalities | % | Axis 1 | Axis 2 |
|------------------------|-----------------------------|-----|------------|------------|
| | | | coordinate | Coordinate |
| Gender | man | 49 | 0.16 | -0.15 |
| | woman | 51 | -0.16 | 0.15 |
| Age | 15-24 years | 16 | 0.97 | -0.43 |
| _ | 25-34 years | 15 | 0.74 | -0.38 |
| | 35-44 years | 20 | 0.31 | -0.11 |
| | 45-54 years | 17 | -0.15 | 0.22 |
| | 55-69 years | 20 | -0.68 | 0.35 |
| | 70 year or more | 13 | -1.21 | 0.27 |
| Personal income | <199.000 | 28 | 0.00 | -0.23 |
| | 199.000-299.000 | 19 | -0.43 | -0.09 |
| | 299.000-399.000 | 24 | 0.01 | 0.11 |
| | 400.000-499.000 | 13 | 0.27 | 0.20 |
| | 500.000-599.000 | 5 | 0.32 | 0.38 |
| | 600.000+ | 6 | 0.48 | 0.29 |
| | no info | 4 | | |
| Education | elementary school (7 years) | 6 | -0.74 | -0.42 |
| | primary school (9 years) | 14 | -0.10 | -0.38 |
| | secondary school | 36 | -0.07 | -0.40 |
| | university, without degree | 17 | 0.05 | 0.29 |
| | university, with degree | 27 | 0.27 | 0.63 |
| | no info | 0 | | |
| How many books do you | does not read books | 10 | -0.21 | -0.79 |
| read during a year? | 1-3 books | 21 | -0.03 | -0.29 |
| (indicator of cultural | 4-10 books | 29 | 0.10 | 0.12 |
| capital) | 11-20 books | 19 | 0.11 | 0.31 |
| | 21 books or more | 21 | -0.10 | 0.24 |
| | no info | 0,1 | | |

| Social standing | pupil/student/apprentice | 12 | 0.98 | -0.24 |
|-----------------------|----------------------------------|----------|-------|--------------|
| Social standing | unemployed | 1 | -0.09 | -0.52 |
| | worker, unskilled | 7 | 0.24 | -0.71 |
| | worker, skilled | 16 | 0.10 | -0.25 |
| | | | 0.10 | 0.34 |
| | executive officer | 11 10 | 0.25 | 0.34 |
| | | 5 | 0.05 | |
| | self-employed | 3 | 0.05 | 0.19 0.39 |
| | senior executive | - | | |
| | retirement pensioner | 15 | -1.15 | 0.31 |
| | insured | 7 | -0.81 | -0.31 |
| | married, without own paid work | 1 | -0.49 | -0.12 |
| | other standing | 10 | 0.19 | 0.12 |
| | no info | 2 | | |
| Line of business | industral/handicraft | 11 | 0.11 | -0.44 |
| | commodity trade/shop | 6 | 0.48 | -0.53 |
| | communication/transport/post | 4 | 0.10 | -0.34 |
| | agriculture/forestry | 2 | -0.68 | 0.03 |
| | health/social service | 13 | 0.07 | 0.22 |
| | teaching/research | 9 | 0.14 | 0.69 |
| | banking/assurance/finance | 2 | 0.42 | 0.16 |
| | commercial services | 4 | 0.53 | 0.14 |
| | pub adm/defence/police/judiciary | | 0.23 | 0.41 |
| | other line of business | | 0.37 | -0.09 |
| | no line of business | | -0.43 | -0.11 |
| | no info | 6 | | |
| Public/private sector | public, state | 14 | 0.25 | 0.41 |
| - | public, municipality | 17 | -0.14 | 0.16 |
| | private | 39 | 0.31 | -0.20 |
| | other answers | 18 | -0.25 | -0.06 |
| | no info | 12 | | |
| Father's and mother's | both had elementary or primary | l l | | |
| education | education | 38 | -0.49 | 0.02 |
| | one had secondary school | 13 | 0.00 | -0.13 |
| | both had secondary school | 10 | 0.49 | -0.35 |
| | one at universitety level | 14 | 0.48 | 0.24 |
| | both at university level | 13 | 0.89 | 0.35 |
| | no info | 12 | | |
| | | | 1 | |

Notes

 $^{^{1}}$ Admittedly, the point of occasional smoking does not statistically contribute to the axes above average, but is still included here – as the only exception – because it is of interest to the problem.

 $^{^{2}}$ Even if some occasional smokers may be former daily smokers moving towards a smoke-free life, occasional smoking is not a common transitionary step in processes to quit daily smoking, which usually happens "cold turkey".