

Menthol cigarettes and smoking cessation behaviour: a review of tobacco industry documents

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ABSTRACT

Objective To determine what the tobacco industry knew about menthol's relation to smoking cessation behaviour.

Methods A snowball sampling design was used to systematically search the Legacy Tobacco Documents Library (LTDL) (<http://legacy.library.ucsf.edu>) between 15 May to 1 August 2010. Of the approximately 11 million documents available in the LTDL, the iterative searches returned tens of thousands of results. A final collection of 509 documents relevant to 1 or more of the research questions were qualitatively analysed, as follows: (1) perceived sensory and taste rewards of menthol and potential relation to quitting; and (2) motivation to quit among menthol users.

Results Menthol's cooling and anaesthetic effects mask the short-term negative physiological effects of smoking such as throat pain, burning and cough. This provides superficial physical relief as well as psychological assurance against concerns about the health dangers of smoking that would otherwise motivate smokers to quit. Menthol smokers, particularly women, perceive the minty aroma of menthol cigarettes to be more socially acceptable than non-menthol cigarettes.

Discussion Consumers believe menthol's sensory effects equate to health protections and that menthol cigarettes are more socially acceptable than non-menthol cigarettes. Menthol in cigarettes may encourage experimenters who find non-mentholated cigarettes too harsh, including young or inexperienced users, to progress to regular smoking rather than quitting, and may lessen the motivation to quit among established menthol smokers. The perception of menthol cigarettes as more socially acceptable lessens the impact of smoking denormalisation on quitting motivation. Menthol makes cigarettes easier and more palatable to smoke and less desirable to quit among established smokers. Fewer smokers quitting contributes to the incidence of tobacco-related diseases.

INTRODUCTION

The Family Smoking Prevention and Tobacco Control Act (FSPTCA) gave the US Food and Drug Administration (FDA) regulatory authority over tobacco products. On 22 September 2009, the FDA exercised this authority when it announced a rule banning cigarette flavourings specified in the Act. This ban did not include menthol, however, because it was excluded from the list of banned flavourings in the Act because of opposition by the tobacco industry. The fact that menthol was not included in the original list of banned flavours concerned many in the public health arena who argued that menthol is used by the tobacco industry to attract young, inexperienced smokers and/or African-Americans.¹

The concentration of menthol in tobacco products varies according to the product and the flavour desired, but is present in 90% of all tobacco products, 'mentholated' and 'non-mentholated'.²⁻³ Studies in the peer-reviewed academic literature of the association of menthol smoking and cessation have yielded conflicting findings. One reason for inconsistencies is differences in study design (eg, clinical treatment studies, population-based studies), and another is differences in cessation outcomes (eg, length of time abstinent, length of time to relapse, number of quit attempts) across studies. Some studies yielded null findings for effect of menthol on amount smoked, quitting, or time to first cigarette in the morning,⁴ or smoking abstinence.⁵ Other studies showed mixed results, with no difference in number of past quit attempts between menthol and non-menthol smoking groups, but shorter duration since most recent quit attempt (shorter time to relapse, a measure of difficulty quitting) among menthol smokers,⁶ and significantly greater risk of relapse among menthol smokers than non-menthol smokers.⁷ However, other studies revealed significant associations of menthol with lower smoking cessation rates^{8,9} and lowered confidence in ability to quit,¹⁰ and less likelihood of quitting particularly among younger African-American menthol smokers than their non-menthol smoking counterparts.¹¹

The tobacco companies monitored the independent biomedical literature but seem to have conducted very little in-house research on the direct role of menthol in quitting smoking and relapse (ie, the possibility that menthol itself addicts smokers or otherwise makes it biologically more difficult to quit smoking). The tobacco industry documents, however, reveal considerable interest in menthol's indirect role in keeping smoking attractive enough to dissuade cessation (ie, the possibility that menthol either enhances some aspects of smoking that make it pleasant or diminishes some aspects that make it undesirable, apart from the physical addiction issue). 'Quitting' is not consistently defined in the internal industry documents (and is often not defined at all), so a formal definition of 'quitting' could not be obtained from the documents. Quitting can be understood as cessation of smoking in general terms only.

Menthol and non-menthol smokers can experience similar potential motivations to quit, including having smoking-related illnesses and holding beliefs regarding smoking-related health harms.¹² Unger *et al*¹³ found that African-American smokers in the Los Angeles area who smoked menthol cigarettes believed menthol has medicinal effects, believed menthol cigarettes were



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less harmful than non-menthols, and preferred the menthol taste and sensation, relative to the beliefs and preferences of non-menthol smokers. Such beliefs preferences raise questions about the motivations to quit among menthol smokers relative to non-menthol smokers. An interview study of African-American smokers in Atlanta suggested the importance of beliefs about menthol; group discussions revealed that participants thought smoking menthol cigarettes leads to fewer negative health effects than smoking non-menthol cigarettes, and that switching from menthol to non-menthol would be a good way of attempting to quit smoking for habitual smokers.¹⁴

The perceived health and sensory benefits of menthol may play an indirect role in discouraging cessation. In 2008, Kreslake *et al*¹⁵ identified two types of menthol smokers from their analysis of internal tobacco industry documents: (1) those who find non-menthol smoke too harsh and irritating, and (2) those who specifically seek out menthol flavour and sensory effects. For the first group, menthol functions to reduce the negative sensory experiences associated with smoking, suggesting menthol may inhibit cessation motivation in this group. In the second group, some may have adopted menthol products to cover the unpleasant taste of tobacco and have grown accustomed to, and even desirous of, stronger menthol taste over time, suggesting menthol eases the transition from experimental to established smoking for this group of smokers, rather than from experimentation to abstinence in the absence of menthol.

Given that the literature that suggests the importance of subjective experiences and health beliefs that may have indirect relations to menthol use and motivation to quit, this report sought to examine the industry's interest in these factors. Important areas of focus to better understand the industry's interest in the indirect role of menthol in smoking cessation were identified as follows:

1. Perceived sensory and taste rewards of menthol and potential relation to quitting
2. Motivation or desire to quit among menthol users, including health concerns and social unacceptability of smoking

This report sought to understand what tobacco companies knew about consumer perceptions and feedback on these two factors, and whether and how the companies intended to use these factors to discourage quitting or encourage continued smoking.

METHODS

A complete discussion of the general tobacco documents research methods employed in this study is found elsewhere in this issue.¹⁶ Details specific to the current study are as follows: in this qualitative research study of the digitised repository of previously internal tobacco industry documents, a snowball sampling design¹⁷ was used to search the Legacy Tobacco Documents Library (LTDL) (<http://legacy.library.ucsf.edu>). The LTDL was systematically searched between 15 May to 1 August 2010, using standard documents research techniques. These techniques combine traditional qualitative methods¹⁸ with iterative search strategies tailored for the LTDL data set.¹⁹

The initial keyword searches combined terms related to: menthol, quit/quitting/quit, cessation, relapse, motivation, research, quantitative, qualitative and report. This initial set of keywords resulted in the development of further search terms and combinations of keywords including menthol cigarette brand names (eg, Kool, Newport, Salem), identified demographic groups (eg, African-American, Black, Asian, women/woman/female, young adult smoker/YAS (for young adult smoker)/YAMS (for young adult female smoker)/YAFS (for young adult

male smoker)), 'psychographic' segmentation reports (eg, the 'Coolness' segment referring to menthol users), identified motivations (eg, sensation, health, peer acceptance, offend, smell), tobacco company project names (eg, Project GS, Project UT) and individuals and companies named in correspondences and on research reports (eg, A Udow; Booz, Allen, & Hamilton, Inc.). For each set of results, I reviewed the first 50–350 documents. If documents did not appear to be relevant to the research questions, or if there was a repetitive pattern of documents, I moved on to the next search term. A final collection of 509 documents were deemed relevant to 1 or more of the research questions and were qualitatively analysed. Memos were written to summarise the relevant documents to further narrow down to the 46 representative documents that are cited in this paper.

RESULTS

Perceived sensory and taste rewards of menthol and potential relation to quitting

Menthol styles of cigarettes were originally marketed as a remedy to the dryness and irritation smokers experience when smoking regular cigarettes.^{20 21} The first mentholated cigarette is credited to Lloyd 'Spud' Hughes, when in the 1920s he added menthol crystals to his smoking tobacco tin while suffering a cold.^{22 23} Bearing Hughes's nickname, Spud cigarettes in the 1920s became the first commercial menthol brand to be marketed in the US. The anaesthetic and cooling qualities of menthol, along with the minty menthol taste, change the regular smoking experience and, to some smokers, make it a more palatable one.^{24 25} 'Personal concerns smokers' are those who want the 'lowest tar and nicotine with minimal taste trade-offs'.²⁶ Although 'low-tar' products tend to dominate in this segment of smokers, RJ Reynolds (RJR) noted in a 'Market Study Mindset, Attitude, and Usage Qualitative Report' in late 1990 that [personal concerns] 'respondents cite the harshness of regular cigarettes as the reason for switching to Lights or menthol. They want flavor and smoking satisfaction, without the negatives of regular cigarettes...'. The report cited the representative comment of one respondent: 'I started with Marlboro, but it tore up my throat. Salem Lights are easier on my throat'.²⁶

A document retrieved for the Cipollone v Liggett case provides analysis of a report from Philip Morris (PM) Consumer Research and Marketing Department executive A Udow. This analysis reads:

The report takes a special interest in 'occasional menthol smokers.' They attempt to estimate the volume of menthol cigarettes consumed by occasional menthol smokers. It is possible that such people are being encouraged to switch to menthol cigarettes when their throats appear to be raw or to alleviate other symptoms. This may have important implications.²⁷

Although it is unclear what the analyst thought those important implications may be, a 1990 Booz, Allen, & Hamilton, Inc. (a strategic consulting firm) report strategizing for RJR in the face of threats to industry volume suggests the role of menthol in dealing with those threats. The report emphasised that the '(o)riginal reason for menthol was therapeutic—providing a refreshing alternative to hot, harsh tobacco taste of existing brands', and that a cigarette '(p)roduct should provide a smooth smoking experience that is easy to adapt to'.²⁸ Menthol acts as a means of masking, covering up, or avoiding the negatives of smoking, particularly the heat, harshness and dryness of cigarette smoke. RJR observed in 1980 that '(m)enthol smokers want to smoke a 'refreshing' cigarette.... (T)hey smoke menthol cigarettes primarily to avoid negatives they

associate with non-menthol smoking, that is, harshness, dryness, hot taste, unpleasant aftertaste'.²⁹

In addition to avoiding the negative sensations of smoking that menthol facilitates, menthol adds a flavour and a sensation unassociated with tobacco that menthol smokers enjoy in a way similar to an over-the-counter throat lozenge, a candy treat and even a drug. A 1979 Roper Organization study on menthol and 'low-tar' smokers' attitudes prepared for PM found that '(m)enthol seems to have some of the properties of a drug.... (s)omething with the combined properties of Listerine, Anbesol, Chloraseptic lozenges, Lavoris, Life Savers and ice comes to mind'.³⁰ Jay Faberman of the PM Market Research Department wrote to Al Udow of the PM Marketing Department in 1969 that 'menthol cigarettes add the sensations of coolness and menthol taste which yield a desired sensory experience in about one-fifth of all smokers'.³¹ The 1979 Roper study similarly asserted:

The key effects that seem to appeal to menthol smokers are menthol's perceived:

Cooling effects

Clean, antiseptic effects

Slightly numbing, anesthetic effects

Heady, lifting effects.³⁰

These experiences appear to engender a strong affinity for, and loyalty to, menthol cigarettes among their users. The Landis Group conducted a qualitative study of menthol cigarette users for PM and reported in July 1992, that '(m)ost respondents said they would be motivated to try a new cigarette if one was 'offered for free', but they would only be motivated to switch if it had a similar flavor to the brand they were presently smoking. Flavor/taste seems to be the most important element for menthol smokers'.³²

The Nowland Organization, Inc., conducting an analysis in 1976 for Lorillard, manufacturer of the popular Newport brand, noted some of the most frequently mentioned positive descriptors in a desirable cigarette were 'mild/mildness', 'smooth', 'aroma/aromatic', 'cool', 'menthol (cited by menthol smokers only)', and 'mellow'.³³ These descriptors were generated by interviewees not in a study of menthol cigarettes exclusively but of 'super hi-fi'³⁴ (SHF; super high filtration cigarettes), but menthol cigarettes smokers were included in the study. The 1976 analysis stated, '(i)nterestingly, a mild taste is most frequently defined as a nonirritating taste—not harsh, not burning, 'it doesn't make you cough' or 'choke''.³³ The analysis noted that participants said:

'Smooth' smoke (as noted) 'feels good.' It is not harsh, not irritating, not hot, biting or burning. You can 'feel the smoke going in,' but it is 'gentle to the mouth,' it 'flows easily'... In some cases, it may even be described as 'soothing' (especially by menthol smokers).³³

Further, the analysis stated that '(n)one of the (28) regular menthol smokers in the sample feels that menthol in general, or the menthol level he smokes, is irritating; and a number specifically comment that they find menthol cigarettes to be less irritating'.³³

One main difference between Lorillard's SHF classified smokers and menthol smokers is in the amount of enjoyment a smoker seeks depending upon the style of cigarette smoked. Describing SHF smokers, the Nowland Organization continued:

Those who do not find taste an important variable indicate that they do not smoke primarily for sensory enjoyment but, rather, from habit, to relax, to have something in their hand, etc.; or they

just do not give taste much thought; or all they ask is that the taste be smooth, mild, non-irritating. Several (SHF smokers disproportionately) say they do not particularly like the taste of any cigarette.³³

Whereas smokers of ostensibly 'low yield' products (eg, 'hi-fi/high filtration' or 'low tar') typically gravitate towards those styles for negative reasons such as health concerns or even feelings of guilt about smoking, menthol smokers gravitate towards menthol styles for affirmative reasons of sensation, taste and aroma. Perhaps not surprisingly, in 1979 the Roper Organization reported that menthol smokers 'express slightly less desire to quit smoking than do non-menthol smokers—39% would like to quit, vs 43% of non-menthol smokers'.³⁰

Among menthol users who recognise the negatives associated with smoking such as irritation, menthol is perceived to be a partial solution to the negatives and an alternative to quitting. Evidence of this perception was shown in a 1973 study of the attitudes and behaviours of menthol smokers conducted for RJR:

Generally when a respondent reported that he made a conscious decision to switch to a mentholated brand it was because of some problem, minor or major. For instance, many switched to mentholated cigarettes because of throat irritation, colds, coughs or chronic bronchitis. **Sometimes respondents saw smoking a mentholated brand as the only alternative to giving up smoking altogether.**³⁵ (Emphasis added.)

Motivation or desire to quit among menthol users

Health concerns

Health concerns are one of the primary reasons smokers quit. The Sherman Group Inc. conducted a reconnaissance study of Lorillard's Newport for RJR in 1976 and found:

In rejecting the 'regular' cigarette taste, the smokers are referring back to their own experiences. These young smokers began smoking the 'popular' brands, Winston, Marlboro, Tareyton and Kents, etc, and moved to menthols for a variety of reasons or circumstances; the rejection of tobacco taste, the search for a 'milder' cigarette, personal influence, or **the circumstances of having a cold and wanting to continue smoking, but being unable to 'handle' the hot taste of cigarettes in an already irritated throat.**³⁶ (Emphasis added.)

Menthol imparts cooling and anaesthetic sensations that allow some smokers dissatisfied with the smoking experience to continue smoking. This effect of menthol was viewed as a potential opportunity for tobacco companies; The Landis Group reported to PM in 1992 that:

Over half of the people interviewed were non-menthol smokers first, and changed to menthol for a variety of reasons: 'during an illness the non-menthol was too harsh', 'tried a friend's menthol, and realized the taste was better', 'got tired of the tobacco taste', etc. In view of these findings, it appears there may be an opportunity to convert non-menthol smokers to menthol cigarettes.³²

A 1972 study conducted by Lorillard's Market Research Department³⁷ affirmed that menthol smokers believe menthol alleviates the harshness of smoking non-menthol styles. Statements by those who switched from a non-menthol to a menthol brand were as follows:

(switcher from Camel to Kool): 'I switched for taste—it seemed milder and less burning in my mouth. The Camels began to taste harsh and bitter and hot to smoke.'

(switcher from Marlboro to Kool): 'I found that I liked the taste and flavor much better. It was more soothing to my throat than that's all. I had a cold and I decided to switch to Kools.'

(switcher from Pall Mall to Kool): 'I started smoking Kools when I had a cold. It felt good so I kept on smoking them. I like the taste of menthol.'³⁷

An undated report by Brown & Williamson (B&W) on 'lapsed/quitting smokers' noted that 'health-related reasons are by far the most prevalent' reasons to quit and observed that the reasons for consumers' awareness of 'less strong' cigarette brands including Salem and Newport were 'taste/flavor, tar/nicotine (sic), (and) throat related'.³⁸ The report found an 'increase in concern (about health issues) but decline in desire to give up'.³⁸

The advertising firm Cunningham & Walsh compiled a report for B&W in 1980 in which they observed that Kool's '(r)emedial specialty brand image' (ie, a brand that offers a remedy to the harshness and burn of smoking) in the early 1950s 'benefits (the b)rand as smokers perceive menthol as less harmful'.³⁹ In a 1960s brand evaluation, B&W noted that '(e)mphasis on the throat, with its important health implications, has... been an important part of Kool advertising since 1960. In light of the 'smoking climate' in recent years this could very well have benefited the brand',⁴⁰ the "smoking climate" in recent years' referring to growing smoking-related health concerns. The Creative Research Group perhaps described the soothing qualities of menthol and its potential role in discouraging concerned smokers from quitting most plainly in a 1986 report for Imperial Tobacco:

Quitters may be discouraged from quitting, or at least kept in the market longer, by either of the two product opportunities noted before. A less irritating cigarette is one route. (Indeed, the practice of switching to lower tar cigarettes and sometimes menthol in the quitting process tacitly recognizes this.) The safe cigarette would have wide appeal, limited mainly by the social pressures to quit.⁴¹ (Emphasis added.)

These statements explicitly recognize menthol's ability to soothe irritation as a barrier to quitting.

According to a 30 May 1973 Lorillard meeting agenda to discuss 'Kent Menthol 100's', the objective of a menthol line extension of Lorillard's 'low tar' Kent brand was to 'convince smokers of competitive menthols (as well as smokers contemplating entering the category) that Kent menthol is the menthol that offers refreshing menthol smoking satisfaction and health reassurance'.⁴² One of B&W's major objectives at the beginning of the 1980s was to 'obtain at least 12% share of market for KOOL by 1985'.⁴³ In delineating steps to achieving that objective, B&W listed as one of the 'key obstacle to overcome' that 'KOOL must move into the health reassurance segment so that 45% of KOOL business will be in the perceived product safety arena by 1982'.⁴³

According to this B&W brand planning document in 1978 (estimated date), a prime Kool objective for 1979–1985 was also to '(p)rovide product safety reassurance while enhanc(ing) the satisfaction and refreshment perception of the appropriate KOOL styles, through the successful, national launch in 1979 of either: 1. Low-'tar' parent (or) 2. Repositioned KOOL Milds'.⁴³ This emphasis on 'product safety reassurance' points to the explicit role of menthol, like 'low tar' and 'mild', in the company's efforts to overcome consumers' perception of the dangers of smoking.

The question arises whether beliefs about the health benefits of mentholated cigarettes may discourage potential quitters

from quitting in favour of switching to a mentholated brand or style. A focus group study conducted for American Tobacco in 1969 tested, in part, perceptions of a new menthol product. It was observed that:

Menthol smokers indicated that they smoked menthol cigarettes because they were 'mild', 'cooling', 'refreshing', and 'soothing to the throat'. They considered non-menthol cigarettes to be irritating and strong.... **There were indications that the menthol smokers subconsciously perceived menthol cigarettes as being healthier.** There was somewhat of a 'health image' associated with menthol, related to its masking of the tobacco taste, and its association with medicine, colds, and sore throats.⁴⁴ (Emphasis added.)

This complements the William Esty study for RJR in 1973 that stated, '(s)ometimes respondents saw smoking a mentholated brand as the only alternative to giving up smoking altogether'.³⁵

Lorillard observed in 1972 that '(b)rand-switching has resulted in a 13% gain for Menthols which is larger than the 8% for Hi Fi ('high filtration') brands, the only types gaining from claimed switching', and cited a research participant's explanation that 'I started smoking Kools when I had a cold. It felt good so I kept on smoking them'.⁴⁵ In 1976, B&W noted that 'evidence indicates that a pseudo-health image has accrued to mentholated cigarettes'.⁴⁶ Then, 2 years later, B&W explicitly acknowledged its Kool franchise '(r)ides on the connotation that menthol has health overtones'.⁴⁷

Following the 1952 *Readers Digest* article 'Cancer by the Carton',⁴⁸ which marked widespread and growing public awareness of the health dangers of smoking, a concurrent change in smoking rates and in cigarette style offerings took place. This 'health scare' marked a brief decline in per capita cigarette consumption in the US in 1953–1954.⁴⁹ Declines in smoking rates accelerated in the latter half of the 1960s after the 1964 US Surgeon General's Report 'Smoking and Health'⁵⁰ and the 1965 Federal Cigarette Labelling and Advertising Act,⁵¹ according to the Centers for Disease Control (CDC).⁵²

This reduction in per capita smoking especially in the late 1960s corresponded to a shift in the design and marketing of cigarettes, particularly to an increase in filtered and 'low-tar' cigarette styles and brands.⁵³ As B&W observed in a lengthy 1979 study of the 'History and Key Trends in the US Cigarette Market', '(t)he intense growth of [RJR's] Salem from 1957 thru (sic) 1961 coincided with another major development—the Tar Derby'.⁵⁴ (The Tar Derby refers to the efforts of the major cigarette companies in the 1950s to manufacture and promote low tar and nicotine cigarette brands⁵⁵ to 'smokers who can't kick the habit but are worried about their health'.⁵⁶ Tobacco companies attempted to position 'low-tar' cigarettes as an alternative to quitting, as in RJR's 1970s Vantage brand ad campaigns that suggested to health-concerned smokers, 'If you're like a lot of smokers these days, it probably isn't smoking that you want to give up. It's some of that 'tar' and nicotine you've been hearing about'.⁵⁷

Mentholation of cigarettes was another design feature important in this era. The 1979 B&W study asserted:

(t)he Tar Derby was a major factor in Salem's growth (following its introduction in 1956). Salem was perceived to have more taste than competitive (non-menthol 'low-tar') offerings, which resulted in the coincident growth.... Newport, introduced in 1957, also grew during the Tar Derby'.⁵⁴

Whereas 'low-tar' cigarette brands aimed at health-concerned smokers were often derided as 'hot air brands' with no taste

according to RJR in 1970,⁵⁸ menthol brands and styles are perceived as milder and lighter, and yet flavourful. An international qualitative study by PM in 1991 affirmed, '(t)he desire for a 'lighter' cigarette was an important underlying motive for switching to menthol cigarettes. In some cases, the 'menthol' was viewed as compensation for the 'lack of taste' of light cigarettes'.⁵⁹

Due in part to perceptions that menthol is a solution to sore throats caused by smoking, some marketers have assumed menthol smokers were more health oriented. In 1975, RJR stated in an internal marketing presentation that '(m)enthol 85 smokers are more concerned about the alleged hazards of smoking than other smokers (except low flavor)'.⁶⁰ It may be more often the case that menthol smokers are convinced of the soothing throat sensation menthol imparts and are not necessarily likely to seek 'light' or 'low-tar' products. A 1972 Lorillard study of the menthol market noted:

(w)hile health is an important reason for switching, health in terms of throat irritation is more important to Menthol, Lo Fi (low filtration) and taste conscious people.... Menthol smokers are attracted by taste with mildness appealing to the health oriented and with the lack of throat irritation appealing to the taste oriented.⁴⁵

Jay Faberman of the PM Market Research Department observed in his 1969 letter to Al Udow of the PM Marketing Department that '(o)nce the habit is perceived as bad, the smoker thus becomes susceptible (sic) to brand appeals that promise less tar or nicotine, or **to products which make smoking seem more pleasant**'.³¹ (Emphasis added.)

Although non-menthol smokers typically would not, or would only very reluctantly, smoke a menthol cigarette, and that the reverse is true for menthol smokers,³⁰ industry executives nevertheless recognised the potential for conversion of a non-menthol smoker who may consider quitting into a menthol smoker instead. In 1985, Myron Johnston of the PM Marketing Department analysed quitting patterns among younger and older menthol and non-menthol smokers and was puzzled by self-reports among menthol smokers regarding their quit attempts. He noted:

It is also possible that the larger proportion of menthol smokers who report having tried to quit is an artefact, for in the focus groups some people have reported that they switched to a menthol thinking that it would be easier to quit from something they did not really like, only to wind up liking menthol.⁶¹

In this case, Johnston found smokers switching to menthol in an attempt to quit ended up abandoning their desire to quit.

Health concerns often act as a driver of changes in smoking behaviour and desire to quit, with switching to either 'low tar' or menthol as one response to health concerns. Nevertheless, menthol smokers speak positively about their cigarettes more consistently than 'low-tar' smokers. B&W contracted Kapuler & Associates, Inc., in 1981 to research consumers' responses to advertising campaigns for Barclay, a B&W 'low-tar' brand, including a campaign with the tagline 'The Pleasure is Back'.⁶² Some respondents 'did not feel that they smoked for pleasure at all, but simply out of habit—perhaps out of guilt. They had an almost masochistic need not to enjoy smoking. These were mostly hi-fi smokers who wanted to quit and who did not want a more pleasurable cigarette which would make it harder to quit'.⁶² Conversely, a Roper Organization study prepared for PM in 1979 stated that menthol smokers:

...are very positive about menthol cigarettes. They describe them as refreshing, satisfying, good tasting, mild tasting, less irritating, as having good tobacco flavor and as leaving less tobacco breath....

(Menthol smokers) are slightly less concerned than non-menthol smokers about the health and social aspects of smoking.³⁰ (Emphasis added.)

A 1980 focus group report for W K Neher of RJR's Marketing Department pointed to even a kind of disdain for quitting among menthol smokers: 'These menthol smokers were not aware of the tar level of cigarettes and they disliked 'light' brands because they were 'like smoking air' or 'for smokers who wanted to quit'.⁶³ Menthol smokers tend to be lighter smokers than their non-menthol counterparts, light smokers referring not to smokers of 'low-tar' brands but those who smoked half a pack or less per day. The low consumption group, also called 'casual smokers', contained a higher percentage of young adults, females and more menthol cigarette smokers.⁶⁴ Such casual smokers typically felt 'in control' of their smoking, unlike 'guilt-laden' smokers who want to quit but feel they can't.⁶⁵

In studies PM conducted in the mid-1980s, smokers were divided into different segments based on their attitudes about smoking.⁶⁶ The group with the most negative views about smoking—'potential quitters' or 'guilt laden' smokers^{66 67}—were embarrassed about their smoking and uncomfortable smoking around non-smokers, and they were admittedly trying to quit or cut down. Contrary to the experience of 'guilt laden' smokers, the subjective perception of a pleasurable menthol smoking experience appeared to help menthol smokers feel better about their smoking, more comfortable smoking around non-smokers and less in need of quitting.

Social unacceptability of smoking

Another motivation for quitting is the social unacceptability of smoking. Booz, Allen, & Hamilton's 1990 report to RJR stated:

Recent RJR focus group research indicates smokers are feeling increasing pressure from non-smokers and are interested in products to make the smoking experience more enjoyable by reducing smoker/non-smoker tension.... (S)mokers may be concerned about the externally perceived effects of smoking and resulting pressures. Eighty-five per cent believe smoking can be very bothersome to some people. Seventy-five per cent think 'a lot of people view smoking as a negative habit.' Almost 50% believe 'non-smokers would complain less if smoke were reduced'. Fifty to Eighty per cent agree with various statements that the smell of smoke has negative effects on hair, clothes, cars, etc.²⁸

Market research on menthol smokers conducted in Japan for PM in 1991 revealed that one major objection to smoking around others that respondents in this study cited was:

—The smell itself is unpleasant. The smell gets in your hair and clothes (frequent complaint heard from women). It causes bad breath.⁵⁹

Marketing Decision Research (Pacific) Ltd. found menthol was a solution to this problem in a 1992 Hong Kong study for PM: Overall, menthol cigarettes are seen to be lighter in strength and cigarette taste than non-menthol and full-flavoured cigarettes. The 'cooling' and 'refreshing' abilities of menthol have the following advantages:

- make smokers feel comfortable
- less easy to cause throat discomfort
- won't give bad breath
- has no/less cigarette smell & won't stink the environment.⁶⁸

Addressing social acceptability concerns, RJR noted in a 1990 brand positioning report that for the (RJR) Salem and (Lorillard)

Newport brands, 'menthol (served) to lower risk of offending others with odor/smoke'.⁶⁹ The report observed:

- ▶ Another potential example of recent success among 'menthol' brands may be (RJR's)
- ▶ Horizon
 - Horizon is not a menthol-based proposition; it is positioned much more broadly to address social concerns about smoking
 - Yet 40% of its franchise in test market smokes the menthol styles, an index of 133
 - Menthol may support Horizon's positioning as a brand with a solution to social concerns.⁶⁹

Interestingly, RJR's brand Horizon, first introduced as Chelsea^{70–72} was advertised explicitly as a cigarette with 'improved lingering aroma via delivery of a pleasant aroma from the lit end',⁷² but was rejected because mentioning odour served only to emphasise the problem. A 1991 report of focus group testing of Horizon for RJR revealed that:

(t)elling smokers that Horizon will make them and/or their surroundings smell better implies they currently smell unpleasant and offensive. Smokers may privately acknowledge and even openly admit this, but... may prefer not to smoke a cigarette that blatantly brands itself as a solution to an odor problem.⁷³

Conversely, menthol, not advertised overtly as a solution to malodorous cigarette smoke, appears to be more readily embraced by menthol smokers who express cosmetic concerns as more socially acceptable to be around relative to non-mentholated smoke. As the Roper Organization's 1979 report prepared for PM on smokers' habits pointed out, '(m)enthol smokers are slightly less inclined than non-menthol smokers to feel uncomfortable about smoking around others'.³⁰ As the social unacceptability of smoking motivates quitting behaviour, the perception of menthol as more socially acceptable or less offensive to others may indirectly contribute to a lack of motivation to quit smoking among menthol smokers.

DISCUSSION

In their 2010 study of patterns and correlates of menthol cigarette use, Lawrence *et al*⁷⁴ called for more research to understand the motivations for using menthol cigarettes in the socio-demographic groups (non-white, female, lesser educated and lower socioeconomic class) overrepresented in the menthol cigarette market. The findings of the current study of internal documents suggest two potential motivations among these groups: menthol's ability to mask superficial health problems and the perception that menthol cigarettes are more socially acceptable than non-menthol cigarettes. These motivations extend the findings of Kreslake *et al*¹⁵ that one group of menthol smoker (young people and established smokers who have 'traded down') seeks a milder, less irritating cigarette. The findings of the current study show that the tobacco industry was interested in the likelihood that this type of menthol smoker would be attracted to the perceived mildness of menthol cigarettes such that cessation is less of a concern than it would be without the sensory characteristics of menthol.

Menthol smokers report experiencing less throat pain, burn and irritation than their non-menthol smoking counterparts, due to menthol's anaesthetic, soothing and cooling qualities which mask the short-term negatives of smoking such as throat burn and cough. For new smokers starting with menthol cigarettes, they may not experience the negatives of smoking initiation that could otherwise dissuade their smoking and prevent smoking progression. For smokers who experience the negatives of smoking and seek relief, they may consider quitting

as the only good option. The cooling and anaesthetic effects of menthol may advance a smoker from experimental or light smoking to established smoking, rather than stopping experimentation and reverting to non-smoker status in the absence of these effects. Results from this study show menthol smokers having switched from non-menthol to menthol because of the relief menthol offers from burn, pain and cough. Switching to menthol, however, may provide superficial physical relief as well as psychological assurance against health concerns that would otherwise motivate quitting.

Researchers at the CDC reported in 2008 that African-American smokers in Atlanta believed smoking menthol cigarettes led to fewer negative health effects than smoking non-menthol cigarettes, and that switching from menthol to non-menthol would be a good way of attempting to quit smoking for habitual smokers.¹⁴ The industry documents reviewed in the present study suggest otherwise. As PM's Myron Johnston stated, non-menthol smokers may believe switching to menthol would help them quit, but those in his study⁶¹ who did try ended up liking menthol and continuing as smokers. That smokers switching from non-menthol to menthol cigarettes when they have a cold or sore throat points to a presumption of therapeutic or health-protective effects of menthol, effects that lead smokers to believe it is unnecessary to quit smoking in order to protect one's health. Tobacco industry executives consistently recognised the health reassurances such beliefs about menthol imply and have marketed menthol with explicit and implicit health messages.⁷⁵ The implications of health protection and health reassurance that accompany menthol make menthol cigarettes a barrier to quitting motivation.

Menthol smokers experience their cigarettes as milder than 'regular' cigarettes (with exceptions such as Kool brand smokers who are accustomed to high levels of menthol). Menthol smokers overlap with health-concerned 'low-tar' smokers in their uptake of 'milder' cigarettes, and the subjective experience of the soothing and cooling of menthol contributes to a perception of menthol as less harmful. Unlike 'low-tar' smokers, however, menthol smokers tend to derive more sensory enjoyment from their brands, feel less guilt about smoking and have less desire to quit. Trinidad *et al*⁹ found that African-American and Latino menthol cigarette smokers were substantially less likely to have quit for 6 months compared with non-menthol cigarette smokers, even though a greater proportion of African-American and Latino menthol smokers had higher confidence that they could successfully quit than their non-menthol smoking counterparts. The current study found that according to industry research menthol smokers reported feeling more 'in control' of their smoking than smokers of non-mentholated cigarette styles. The reason for the link between mentholation and confidence in one's 'control' over one's smoking cannot be established with the current results. Nevertheless, these results complement Trinidad's findings that menthol smokers are more confident in their ability to quit but less successful actually doing so than non-menthol smokers. It is well established that 'low-tar' cigarettes do not aid in cessation among people who wish to quit; not only it is likely that menthol does not aid in cessation, but evidence from the internal documents also shows menthol is associated with decreased desire to quit.

In addition to health concerns, the growing social unacceptability of smoking in general has prompted quitting. Menthol smokers, particularly women, perceive the smoke from menthol cigarettes to be less offensive to others. Fernander *et al*⁷⁶ found menthol smokers to be significantly less likely than non-menthol smokers to have a smoke-free policy in place in their

What this paper adds

- Menthol smokers tend to consume fewer cigarettes than non-menthol smokers. Some scientific literature finds menthol smokers are less likely to quit than their non-menthol counterparts, but there is some disagreement in the literature regarding menthol's role in cessation.
- The tobacco industry knew that consumers equated menthol's sensory characteristics with health protections, and that they believed menthol cigarettes were more socially acceptable to others than non-menthol cigarettes.
- The industry displayed interest in menthol's indirect role in keeping smoking attractive enough to dissuade cessation (perceived health protections and social acceptability, as opposed to the possibility that menthol simply increases the physical addictiveness of cigarettes) and intended to exploit that role to discourage quitting.

workplaces and their homes. A smoke-free policy in the workplace is presumably less in the control of an individual smoker than a smoke-free policy in the home. Although Fernander *et al* did not explain why menthol smokers were less likely than non-menthol smokers to have smoke-free policies, one explanation, at least for the home policy that is presumably more under the control of the smoker than the work place policy, is the issue of social acceptability. The findings of the current study that menthol smokers believe smoke from mentholated cigarettes to be more socially acceptable than that of non-mentholated cigarettes is consistent with Fernander *et al*'s findings. The perception that menthol cigarettes are more socially acceptable than non-menthol cigarettes lessens the impact of smoking denormalisation on quitting motivation.

Menthol's superficial physical effects (subjective cooling and soothing) contribute to its ability to mislead consumers and potential consumers regarding the relative safety of menthol products. This, along with its fresh or confectionary flavours and its perceived social acceptability, demotivate quitting in smokers who may otherwise quit, and to appeal to uninitiated potential new consumers and younger consumers. Based upon the findings of this study, it appears the importance of menthol to the tobacco industry (and likely a reason that the industry opposes menthol's inclusion in the FDA's list of banned additives) is that menthol makes cigarettes easier and more palatable to smoke and less desirable to quit among established smokers. Fewer smokers quitting contributes to the incidence of tobacco-related diseases. Menthol should be included on the list of banned additives.

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