HOW THE TOBACCO INDUSTRY CONTINUES TO DUPE THE PUBLIC INTO BELIEVING LIGHT CIGARETTES PROVIDE LOWER HEALTH RISKS THAN REGULAR CIGARETTES

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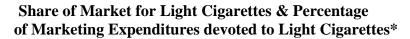
The development of the market for light cigarettes was not driven by consumer demand or "pull," but rather "pushed" by the tobacco firms' heavy marketing and promotion outlays and enabled by the deceptive messages regarding light cigarettes' ostensible health benefits.

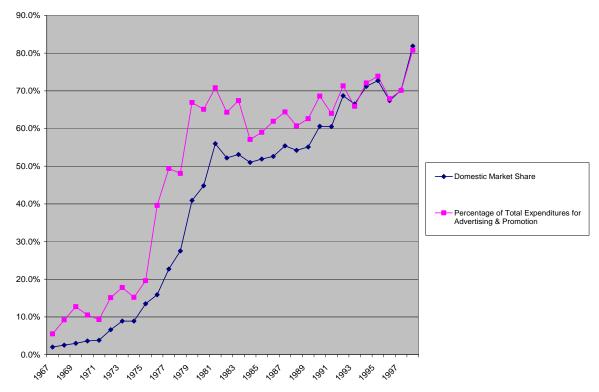
Smokers did not naturally gravitate to the experience of smoking low tar cigarettes. This was not a "pull" marketing phenomenon, where consumer demand drove sales, but rather a "push" phenomenon that was developed and shaped by the industry as a function of its deceptive claims for light cigarettes. Advertising and promotion for the light category drove the process with campaigns that continue to make the case through imagery and otherwise that smokers of light cigarettes are attractive, healthy and vigorous people engaging in attractive vigorous activities; (illness and disease are far removed from these scenes).

From the 1950's (when the focus was on filters that ostensibly reduced tar levels) until 2006, the industry spent an estimated \$235 billion (in 2006 dollars) on advertising and promotion for cigarettes; (data drawn from Federal Trade Commission; FTC 2007; figures for years prior to 1970, 1971 through 1974, and 2006 are estimates). In 2005, the last year for which figures are available, the industry spent over \$13.5 billion—about \$37 million per day—on advertising and promoting cigarettes; (FTC 2007).

The figure below illustrates: 1) the trend with regard to the percentage of the tobacco industry's advertising and promotion dollars that were allocated annually to light cigarettes from 1967 to 1998 the years that the FTC reported this data in their annual report on cigarettes (FTC 2000) and 2) the annual percentage of total cigarette sales represented by light cigarettes. As may be noted, "Light" cigarettes (defined as less than 15 mg. tar) came to dominate both categories.

Also evident in the figure below-- until the 1990's, the percentage of dollars allocated to advertising and promotion for the light cigarette category exceeded their share of market. In effect, the industry was investing in and driving the growth of this category. Ultimately, by the 1990's, given a "ceiling effect" (there is only so high that both percentages could realistically go) the two sets of percentages became more closely aligned.





*FTC 2000; The figure follows these trends only until 1998, because the 2000 FTC report --for data from 1998-- was the last report that documented the percentage of the industry's sales and promotion dollars allocated to light cigarettes.

As a parallel part of their advertising and promotion strategies, the tobacco industry has shaped "viral marketing" campaigns to ensure the success and popularity of light cigarettes.

The tobacco industry has long understood how advertising and interpersonal influence combine to influence the individual smoker or potential smoker. The process starts with the intense advertising and promotion on the part of the industry. In the second step in this process, the message conveyed in the advertising is relayed by individuals as part of the "bandwagon" effect. This process has recently been labeled "virus or viral" marketing.

...[T]he future belongs to marketers who establish a foundation and process where interested people can market to *each other*. Ignite consumer networks and then get out of the way and let them talk." (Godin 2001, p.15; emphasis in the original).

Advertising and promotion serve to initiate discussion by both "opinion leaders" and their "followers" who touch base with one another to assess the merits of what they have seen/heard. In this "multi-step flow" of information those around us can and do influence us, but *this influence comes as a consequence of the advertising and promotion*

to which we are exposed (Assael 2004). While an industry like the tobacco industry can try and point to the interpersonal influence process (people influencing people) it cannot absolve itself of the ultimate responsibility for the popularity, sales and consumption of the products they promote. As shown in the figure above, the tobacco industry chose to "push market" light cigarettes by investing heavily in advertising and promotion to ensure the growth of this segment. With the dollars they spent, together with the promise of reduced health risks, they succeeded in gaining the smoking public's attention for Lights --and their purchase dollars. The "bandwagon" proved to be unstoppable, with the light cigarette category steadily increasing its share of market to the point where it currently accounts for the vast proportion of sales.

In sum, it is important to recognize that this process, where a particular brand or a particular product category (such as lights) gains popularity as a function of person-to-person influence does not stand by itself. It is not an independent and competing source of influence, but properly understood as an integral part of the tobacco industry's global marketing process--their efforts to saturate society with misleading messages about cigarettes. By "igniting consumer networks" among peers, and co-opting the dynamics of person-to-person influence for their own commercial purposes, the companies need not be concerned with whether any particular person saw or was exposed to any particular advertisement. The tobacco companies understand that their massive marketing campaigns are akin to a "virus" where "...the advertiser creates an environment in which the idea can replicate and spread. It's the virus that does the work, not the marketer" (Godin 2001; p.26). In this way, the tobacco industry's advertising and promotion efforts are causally linked to smokers' and potential smokers' actions and choices.

Internal corporate documents make it clear that the tobacco companies have long known that the health issue has been the main motivation for smokers to switch to lower tar/light brands.

Consider the statements below from internal documents of Brown and Williamson, Philip Morris, R.J.Reynolds and Lorillard:

Those who smoked their current brand for less than a year switched for health purposes—to reduce the tar and nicotine level instead of quitting (Brown & Williamson 1977).

The largest group of all [brand switchers are] those who are convinced that smoking is dangerous to their health and who are torn between a conscience that urges them to quit and a hedonistic desire to continue to do something they enjoy.

The very fact, then, that a smoker has decided to switch from a full-flavor cigarette to a low-delivery cigarette tells us something very important about him: he is concerned about his health, and he is willing to do something about it. (Philip Morris 1978).

As low-yield brands become more popular among adults...modeling behavior may lead adolescents to smoke them as well. Furthermore, such brands may

become considered "safer", thus leading teenagers to pay less attention to public health campaigns designed to discourage initiation. (R.J. Reynolds 1980)

Most smokers...do not really understand what tar and nicotine are, or the difference between the two. "Tar and nicotine" is a term commonly used as a single word....Those who smoke low tar and nicotine cigarettes generally do so because they believe such cigarettes are "better for you"—there is less tar and nicotine to do long-term damage (Lorillard 1976).

Research has confirmed the conclusions drawn by tobacco industry executives as cited above: *the* factor leading smokers to low tar/lights is that they believe these cigarettes are "better for you."

Research has documented the salience of health factors in guiding smokers who switch to light cigarettes. Below I discuss two relevant studies in which I was second author: Kozlowski et al. (1998) and Kozlowski et al. (1999). Kozlowski et al (1998) reported on the following question posed to those who smoked light cigarettes: "I'm going to ask you about reasons some people might give for smoking Light...cigarettes. For each one please tell me whether it is one of your reasons for smoking Light...cigarettes" Five options were then read to the respondent: one of the options, taste, was discussed above; the remaining four involved ways that smokers of lights might believe that their cigarette held a health-related benefit: "step to quitting," "less risk," "less tar," "less nicotine." When the last three of the listed risk factors ("less risk," "less tar," "less nicotine,") were analyzed together, only 24% of the respondents failed to select at least one of these three options; in other words 76% answered affirmatively to at least one of the health-related benefits (as reported on p.13). If one adds to this those who only selected the "step to quitting," the percentage would no doubt climb beyond 80%; (while many, if not most smokers, are motivated to quit by health concerns, the "quitting" response was not part of this health-related benefits analysis).

The same logic applies to the second of the studies I worked on with Kozlowski. (Kozlowski et al. 1999). Smokers of light cigarettes were asked to indicate which of four reasons they had for smoking lights; (they could select more than one of the reasons). While a separate analysis was not conducted, with 52% citing "reduce tar/nicotine" and 35% and 38% citing "step towards quitting and "reduce risk" respectively, the percentage citing at least one of these factors would likely climb to 80% and beyond. ("Taste," the fourth reason is discussed fully below).

First hand evidence also documents how successful Philip Morris and the rest of the tobacco industry have been in persuading smokers of low tar/light cigarettes are healthier.

It should be noted that the actual purpose of the Kozlowski et al (1999) study was to develop and assess the effectiveness of a "radio" message informing smokers about the true risk associated with smoking light cigarettes. In the formative steps leading to the development of the "radio" message, earlier drafts of the script were presented to focus

groups consisting of smokers. These drafts tried to argue that there was "no difference" between light and regular cigarettes of light cigarettes. While the final version still took this approach, the smokers' reluctance to accept this argument led to the added statement that if there was any difference, it was a meaningless one; (smoking light cigarettes instead of regulars is "Kind of like jumping off a 15-story building instead of a 20-story building"). This is evidence of how successful tobacco marketers have been in convincing smokers that there *is* a health benefit associated with lights; stating that there was *no difference* in the risks associated with smoking lights versus regulars was so contrary to the views expressed in the focus groups, we had to "bend" the truth so as to ultimately be able to persuade smokers of light cigarettes.

The tobacco industry has pointed to ostensibly conflicting data, arguing that these data demonstrate that smokers don't believe low tar/light cigarettes are healthier and they choose lights for reasons other than health concerns.

The industry has pointed to ostensibly conflicting data, arguing that these data demonstrate that smokers choose lights for reasons other than health concerns; for example, a 1975 survey by the U.S. Department of Health, Education & Welfare found that 40.6% of current smokers believed that all cigarettes are probably about equally dangerous." In 1975, the share of market for light cigarettes (below 15 mg tar) was under 10%. As a result, the vast proportion of those defined as smokers in this survey would have been smokers of regular cigarettes. It is not at all surprising that smokers of regular cigarettes would attempt to justify their own smoking choice, thereby reducing the psychological discomfort/dissonance that would result from acknowledging that their choice (regulars) might be "wrong" and more harmful.

Further explaining this phenomenon was the fact that when first introduced, Light cigarettes were considered relatively tasteless. As acknowledged by the tobacco industry as recently as April 21, 2005 (transcript of Trial Record, United States of America, Department of Justice, Plaintiff v. Philip Morris USA et al., Defendants) when low-tar cigarettes were introduced, the tobacco companies recognized that their taste was aversive—it was hardly seen as selling point for the light cigarette category.

It took a long time for low-tar cigarettes to ever really catch on in this country....[The industry believed that] these products will taste different, and unless the public health community gives, gives people a reason to smoke them [i.e "it's better for your health"], I don't think they're going to be successful (p. 19670).

As such, they did not represent much of an alternative for smokers of regular cigarettes, despite the fact that held out the (false) hope of a "safer" cigarette; (as discussed below, this problem was eventually "fixed" with the advent of lights that yielded considerably more tar). Without shifting to lights as a way of reducing their cognitive dissonance, smokers of regular cigarettes had to take a different path to reduce their dissonance; to do so they developed "protective" attitudes. If one can't change one's behavior and there are clearly negative aspects of that behavior, then changing one's attitudes towards the

behavior in question is typically how one attempts to reduce the dissonance (Festinger 1957; Cohen and Kassarjian 1965). Given this psychological dynamic, it is not surprising that 40.6% responded that that "all cigarettes are about equally dangerous." Unwilling to shift to the tasteless lights, yet uncomfortable in the belief that lights were in some way "better/safer," it is somewhat surprising that the 40.6% figure was not still higher. Evidently, the "message" of light cigarettes' supposed health benefits was hard to ignore, for many of these regular smokers, notwithstanding the cognitive dissonance it generated.

More recently, a study by Schiffman et al. (2001) sampled over 2,120 smokers in a national telephone survey. Of these, 816 were smokers of light cigarettes. Fully 80% of the respondents believed that one had to smoke 2, 3 or more light cigarettes in order to get the same levels of tar delivery as in a regular cigarette. Since tar is typically regarded as a health-risk, 4 of 5 consumers conclude that the less of it, as in a light cigarette, the safer the cigarette. The evidence I present below strongly disputes that mistaken view.

As part of their extensive advertising and promotion campaign for more than a half-century, the tobacco industry have promoted a type of *syllogistic reasoning* that encourages smokers of light/low tar cigarettes to believe they are at less risk.

For over half a century, smokers have been led to believe that a cigarette that tastes "milder" and is "less irritating" must be better for them. As one example, 67% agree that "lights are smoother on the throat and chest." Since smokers cannot know from simply examining a cigarette whether it is healthier than others or not, they need to rely on what they believe is indirect evidence (proxies); smooth and mild serve as such proxies. The syllogism goes: if mildness means less throat irritation, and less throat irritation means—in some way—a healthier cigarette, then mild, light cigarettes must be better for health.

Similarly, if lights are said to have less tar/nicotine, and if it is understood that tar/nicotine have negative health consequences, the smoker is led syllogistically to the conclusion that Lights must be better for health; (less of the "bad stuff"). The senior tobacco executives have engaged in these syllogisms and they believed their customers did as well. Consider the following responses by senior tobacco industry executives:

- Q. In terms of tar delivery, is there a health benefit between a twelve milligram cigarette and an eight milligram cigarette?
- A. My position is that less is better than more. I believe that if a person smokes a cigarette and receives 8 milligrams of tar, that is better than smoking a cigarette and receiving 12 milligrams of tar.

Written Direct testimony of Susan Ivey, CEO of R.J. Reynolds, *United States v. Philip Morris*, 2005 (82:12-20).

My understanding is I think, *pretty common* that...low tar is better than high tar...there have been characteristics associated with tar that are believed to be linked to health issues, and lower tar is better than higher tar.

Deposition of Ronald Bernstein, CEO of Liggett group, (in *United States v. Philip Morris*, 2002 (35:4-36:9; emphasis added).

If something is—is identified as—as being potentially harmful, having less of it would seemingly be better.

Deposition of Ronald Bernstein in *United States v. Philip Morris*, 2002 (25:19-26:5).

- Q. Don't you think that many people wanted low tar cigarettes because they were led to believe that low tar cigarettes were less dangerous to their health than high tar cigarettes?
- A. That may be a perception among some smokers...less is best in all kinds of products, product categories.

Donald Johnston, former CEO of American Tobacco in *Broin v. Philip Morris*, 1994(62: 4-13).

Importantly, in this type of syllogistic reasoning, where the conclusion is self-generated, consumers effectively persuade themselves and this process generates more favorable, stronger, more actionable brand attitudes—attitudes that translate into actual purchase decisions. Consumers are more likely to remember the message and have greater confidence in the brand attitude they have developed. These brand attitudes are likely to be more resistant to counter-persuasion (Kardes 1999; Heimbach and Jacoby 1972; Moore et al. 1986). In sum, this indirect, syllogistic approach, is *more* persuasive relative to directly putting forth the (false) conclusion that "low tar/nicotine cigarettes are healthier for you." As expressed in a report prepared for Brown and Williamson: "...the [advertising] copy should be ambiguous enough to allow the reader to fill-in his/her illogical-logic..." (Marketing and Research Counselors, Inc. 1975, pp. 12-13).

Internal tobacco company documents further indicate that while the Barclay brand may have done a better job in allowing for smoker "compensation" than its competitors, the others in the industry also developed cigarettes that allowed for compensation; (Kozlowski 2005).

As internal documents reveal, the tobacco industry recognized that it would be by allowing actual tar yields to increase that the cigarettes would come closer to tasting like regular cigarettes, and so gain in popularity. One way in which this was done was through "micro-vents" found on the filters of most cigarettes. Research has documented that most smokers are not aware of the micro-vents or of their effects. The micro-vents are inadvertently (or sometimes intentionally) covered/blocked by the fingers/lips of smokers. This blocking has the effect of reducing the ventilation and increasing the levels of tar and nicotine the smoker receives. In a national survey, two thirds (66%) of smokers of light cigarettes were either unaware of the vents or did not understanding that vent blocking increased their exposure to tar.

A carefully documented example of this type of compensation was the development of the cigarette "Barclay" and the reaction to it (Kozlowski et al. 2005). In

the design of the cigarette, not just the manufacturer of Barclay, but competitors as well, considered the compensation principle. In the Philip Morris documents cited below, the company acknowledged the compensation/tar/flavor link and also indicated that they sought to replicate the process.

Product smokes differently in smoker's mouth than in dental dam of smoking machine. Smoker's lips close channels (grooves) between tipping paper and filter lowering dilution and resulting in higher tar delivery.

Meyer LF (1980; Philip Morris document).

This filter design results in some unusual delivery characteristics when smoked by a human that do not occur during machine smoking....The dilution decrease to the [human] smoker results in substantially higher tar delivery than would be the case of a conventionally diluted all CA [cellulose acetate] filter...Subjective impressions by flavor development have corroborated the higher tar estimates...filter process development to either duplicate or simulate the Barclay effect is in progress.

Houck WG. (1980; Philip Morris Document; emphasis added).

The tobacco industry sought to take advantage of the multiple ways in which smokers' compensation alters the real tar yields for smokers as compared to machine-generated tar yields.

Consider the following statements in internal corporate documents from R.J. Reynolds, Lorillard and Philip Morris:

....[S]ome people change their smoking habits and attempt to compensate for lower 'tar' and nicotine deliveries, for example, by taking larger puffs, more puffs, or smoking more cigarettes.

R.J. Reynolds 1978

...[S]mokers tend to deviate more from the standard (of the FTC machine test]...with highly ventilated, low [tar/nicotine] yield brands. These kind of cigarettes generally...make it easy to expend some extra puffing effort Lorillard 1981

The smoker data collected in this study are in agreement with results found in other project studies. The panelists smoked the cigarettes according to physical properties; i.e., the dilution and the lower RTD of Marlboro Lights caused the smokers to take larger puffs on that cigarette than on Marlboro 85's. The larger puffs, in turn, increased the delivery of Marlboro Lights proportionally. In effect, the Marlboro 85 smokers in this study did not achieve any reduction in smoke intake by smoking a cigarette (Marlboro Lights) normally considered low in delivery; (Philip Morris 1975).

Promoting light cigarettes as extensions of major brands and aligning them with the mother brand (e.g. Marlboros, Marlboro Lights), helped shaped smokers' perceptions of their taste.

At the same time as they developed light cigarettes that allowed for compensation, the tobacco companies learned how to boost the *perceived* strength of the taste, by using their advertising to shape the images associated with Lights. The companies viewed the taste dimension much as a "Rorschach ink blot test." Light cigarette smokers could be induced to see/taste in the cigarettes what the companies wanted them to see/taste.

...[I]t is almost impossible to know if the taste smokers talk about is something which they, themselves attribute to a cigarette or just a "playback" of some advertising messages;" (Marketing and Research Counselors, Inc, 1975, p.2).

The industry further understood that they could "borrow" some of the brand equity established for their primary (regular) brands such as Marlboro Reds ad Camels for the benefit of the light cigarettes. They did so by creating brand extensions—Marlboro Lights, Camel Lights etc. and using the same advertising themes and imagery that had been so successful to shape the imagery associated with the light extensions. That this strategy could affect smokers perceptions of the light cigarettes *taste*, is recognized in their internal documents.

...[O]ther free standing low tar brands such as Kent, Vantage, Carlton, etc. were perceived to be weaker and have less taste than the line extension low tars: like Marlboro Lights, Winston Lights, Camel Lights. Apparently these line extension low tars *share the taste heritage* of their parent full flavor brands; (Philip Morris 1990, pp. 13-14;emphasis added).

When R.J. Reynolds sought to develop a low yield cigarette in 1976, they recognized the image problem associated with low-yield cigarettes and set out to address it:

What we want is to portray the feeling and image projected by Marlboro and Kool advertising on a Vantage/Merit type of cigarette. In other words, put "balls" (two of them) on a low "tar" and nicotine cigarette and position.

Hind et al. 1976, p.63

The tobacco industry has acknowledged that the taste of *regular* cigarettes hardly serves as a positive benchmark.

One needs to question whether the "standard" for taste set by regular cigarettes is such that the taste of regular cigarettes is a positive feature? Are regular cigarettes inherently "tasty?" Internal documents indicate that the tobacco companies believed that the initial taste for (typically underage) starter smokers was aversive and sought to take

measures to compensate for this. As early as 1959, a Philip Morris document focused on "mildness" as a strategy for attracting young starters: "we also should win more young non-smokers with mildness;" (memo from W.H. Danker to R. N. DuPuis May 28, 1959). With nearly nine in ten smokers starting before age 18 and more than half of these smoking regularly by 18 (Lynch and Bonnie 1994; USDHHS 1994), it is clear that "young non-smokers" was referring to those under 18.

In 1974, R.J. Reynolds considered flavored cigarettes as a way of masking the tobacco taste. A meeting at the R.J. Reynolds offices resulted in a memo titled "New Products." Under the authorship of J. Donati of Taitham-Laird & Rudner, an R.J. Reynolds advertising agency, the memo served to define a "Cigarette Designed for Beginning Smokers."

This cigarette would be low in irritation and possibly *contain an added* flavor to make it easier for those who have never smoked to acquire the taste for it more quickly; (J. Donati (1974; emphasis added)).

After considering flavors including "citrus, apple, grape, herbs and spices, cola, coffee, chocolate and hickory" the options for further work were narrowed to cola, coffee and chocolate. Today R.J. Reynolds markets flavors like "Mocha Taboo" and "Midnight Berry" through its "Kool" brand. This strategy would suggest that the company believes that the taste of tobacco is best when masked.

The tobacco industry has advanced the "taste" of low tar/lights cigarettes as the primary reason they are chosen by smokers. When questioned about the role of this false and illusory dimension of low tar/light smokers' responses are often misleading.

When smokers are asked why they smoke light cigarettes, significant numbers may respond that it is because of the "taste." This is understandable—they first experience the cigarette on their tongue and in their mouth—the most apparent locus of taste. But research tells us that "taste" is a good deal more than what we experience on our tongue. Twenty years ago, the Coca Cola company was concerned about losing market share among young cola drinkers to Pepsi Cola. Research suggested that younger consumers appeared to prefer the slightly sweeter taste of Pepsi. In response, Coca Cola developed a sweeter version of their product and proceeded to extensively test market it in blind taste tests across the country. Repeatedly and reliably *in blind taste tests*, consumers indicated that they preferred the sweeter version to the regular Coke. With that evidence in hand, Coke introduced "New Coke" with the new, sweeter formula. What happened next was shocking to Coke. Once the product they were drinking was *labeled* Coke, that knowledge impacted how they evaluated what they tasted—now they hated it. Within three months Coke had retreated and was pushing its original formula "Classic" Coke again (Fournier 1999; rev. 2001).

That taste is, at least in part, a function of how products are portrayed/labeled and advertised has been carefully researched in the context of "field" experiments with foods. In one such experiment, the same lunch meals were sold in a university faculty cafeteria

but were labeled differently on different days. For example, on some days one such meal was identified as "Succulent Italian Seafood filet" but on other days merely as "Seafood Filet." Those who bought and ate the foods when they were described in an embellished way reported that: the foods were more appealing to the eye; *they tasted significantly better*; and after eating the meal they food felt more "comfortably full and satisfied." (Wansink et al. 2004).

Interestingly, when desserts were labeled "healthy" (e.g. "chocolate pudding vs. "healthy chocolate pudding; apple crisp vs. healthy apple crisp). they were rated as tastier. The researchers reasoned, that as long as the dessert actually tasted good, consumers' initially lower expectations regarding something labeled "healthy" would be disconfirmed; that is, they would have been surprised by the good taste. Pleasantly surprised, the unexpected contrast between their actual and expected experience would have led them to evaluate the taste of the dessert more positively than someone who had seen the dessert label without the adjective "healthy;" (Wansink et al. 2004b).

Smokers of regular cigarettes who switched to what they perceived to be "healthier," light cigarettes, would have had a parallel disconfirming experience. These smokers would have expected light cigarettes to yield less taste (along with less tar). However, given the compensatory smoking behavior described above, light cigarettes yielded just as much tar/taste. As a result, the pleasantly surprised light cigarette smokers were quick to focus on the taste as the apparent motivation for smoking lights.

As with the food experiments cited above, if questioned, smokers are almost certainly not going to be aware of how the label "light" (and hence the inference "healthier") influence their perceptions of the cigarette's taste. They revert to the more proximal evidence—what they believe they experience—on their tongues—and their answer as to why they smoke the cigarette they do smoke may reflect that logic.

In two court cases where both Philip Morris and R.J. Reynolds sued Loews/ Lorillard, it was evident that these tobacco companies do not believe that smokers are primarily guided by taste in selecting light cigarettes

The plaintiff firms, Philip Morris and R.J. Reynolds argued that in a comparative taste test, smokers reported that the Lorillard low tar brand tasted better than the comparison brand *only if they were first told that Lorillard's brand had lower tar than either the R.J. Reynolds or the Philip Morris comparison brand*. When (other) smokers made the same comparative taste test without being reminded of the relative tar levels, their taste preferences were very different.

The basis of both suits was the approach taken in two parallel Lorillard surveys asking smokers to compare the taste of its low tar "Triumph" to R.J. Reynolds' Winston Lights and to Philip Morris' Merit. Subsequent Lorillard advertising claimed that the preponderance of the smokers tested appeared to prefer the taste of Triumph over Winston Lights and that it was the "National Taste Test Winner" over Merit. Both plaintiffs Philip Morris and R.J. Reynolds argued that these claims were deceptive

inasmuch as the taste question posed in each survey had, as a preface, a reminder of the lower tar scores for Triumph relative to those for Winston Light and for Merit. Each of the plaintiff companies ran a test of their own, where the tar scores for the two brands were not revealed and the resulting taste preferences in their research were very different.

These comparisons suggest how much of what is ostensibly labeled as "taste" is influenced by other factors; in this case, the salience of how "light"/low tar a cigarette might be. In effect, the plaintiff firms acknowledge that where smokers are reminded of tar yields, *the relative tar levels and not taste* are the determining factors in the smokers' evaluations of the cigarettes; (R.J. Reynolds Tobacco Company, Plaintiff, v. Loew's Theatres, Inc; No. 80 Civ 4197 (RWS) United States District Court for the Southern District of New York; 511 F. Supp.867; 1980 U.S. Dist. LEXIS 16738; 210 U.S.P.Q. (BNA) 291; October 24, 1980; Philip Morris Incorporated, Plaintiff, v. Loew's Theatres, Inc., No. 80 Civ. 4082 (RWS) United States District Court for the Southern District of New York; 511 F. Supp.855; 1980 U.S. Dist. LEXIS 12554 July 26, 1980).

Of course, for decades the tobacco companies have used low tar/lightness as a critical way of selling cigarettes and have made that dimension very salient for smokers. Following the logic presented above, it is reasonable to expect that when respondents are asked, they may say that "taste" is the reason they prefer light/low tar cigarettes. Note, however, that following the logic of the two court cases discussed above, the causal sequence is, in fact, reversed. In actuality, it is because their cigarettes are light (and advertising and promotion continue to make that dimension salient) that smokers say they prefer the taste. They would not say so for the same cigarette, if its "lightness" was not made salient.

The tobacco industry has misleadingly used lighter colors (whites and pastels) on the cigarette packages and in their advertising to persuade smokers that low tar/light cigarettes were purer and healthier.

Because consumers often cannot directly judge the merits of a product claim, they develop heuristics or "rules of thumb" which involve relying on "proxies" for the real evidence they are seeking. For example, consider how difficult it is to judge how "fresh" fish in a supermarket is. Supermarket executives have come to realize that for some consumers, fish sitting on a styrofoam tray represents a proxy conveying "not fresh," while fish sitting on ice represents a proxy conveying "fresh."

It is for the same reason that the tobacco industry has signaled the lighter, milder and ostensibly purer and safer features of light cigarettes, by using lighter colors in their advertising and on their packaging. Tobacco firms have been consistent and strategic in developing this tactic. Consider the following statements (as cited in the National Cancer Institute's Monograph 13, p. 217) by Philip Morris and the British American Tobacco Co. respectively:

....[W]hen Marlboro Lights was first introduced in 1971...the advertising was dramatically different...first using water color executions, then big pack sots, a lot of white space and a small cowboy visual. (Philip Morris 1990, p.6).

Light-lighter-lightest were achieved by insistance [sic] on lighter presentations-product story imagery—white packs—pale colours—mildness dominated copy. (British American Tobacco Company, circa 1985, p.13).

A number of other examples of this strategy are cited in Chapter 7 of Monograph 13, including the Philip Morris, Parliament campaign where models were consistently dressed in all white and placed in all white environments (National Cancer Institute; Monograph 13, p. 218). As Koten (1980; cited in Monograph 13 on p. 218) concludes:

Red packs connote strong flavor, green packs connote coolness or menthol and white packs suggest that a cigarette [sic] is low-tar. White means sanitary and safe. And if you put a low-tar cigarette [sic] in a red package, people say it tastes stronger than the same cigarette [sic] packaged in white. (Koten, 1980, p.22).

More broadly, to ask people to provide *reasons for their behavior*; i.e *why* they do what they do is to ask them to play the role of social scientist in explaining their behavior; research has shown that is a very risky endeavor. People develop "theories" as to why they behave as they do and use both these theories and the most proximal evidence in support of these theories, to explain their behavior. Sometimes these theories and evidence are accurate, but very often they are not. One reason they are often incorrect is that people tend to use evidence that is proximal and are less alert/sensitive to more subtle, complex and distal causes of their behavior (Nisbett and Ross 1980). Thus when asked about the taste of the dessert, those in the cafeteria focus on their taste buds and are not likely to be sensitive to the influence of the "healthy" label placed on the dessert on the cafeteria line and on the resulting effect of their positive reaction. When asked about why they smoke light cigarettes, smokers focus on the proximate evidence—their taste buds; they are much less aware of how the label "light" subtly influences their attitudes and behaviors, as well as their compensatory smoking behavior (as described above).

Still today, the industry is not forthcoming about the risks of smoking light cigarettes.

It is only recently that R.J. Reynolds has come to curtly acknowledge that "Smoking causes serious disease" (R.J. Reynolds website; accessed Aug. 26, 2007). However, the website goes on to provide the (would be) smoker with considerable "wiggle room" to justify (continued) smoking:

An individual's level of risk for serious disease is significantly affected by the type of tobacco product used as well as the manner and frequency of use" (R.J. Reynolds website; accessed August 26, 2007).

In effect, smokers are still encouraged to search for a safer "type of tobacco product"—most typically a "light" one. Alternatively, they are encouraged to alter their "manner

of...use." The latter suggestion runs directly contrary (as discussed below) to the widely accepted "compensation" smoking behavior which smokers of light cigarettes use.

The Philip Morris website is more expansive in ostensibly accepting the public health position regarding the risks of smoking any cigarette:

Philip Morris USA agrees with the overwhelming medical and scientific consensus that cigarette smoking causes lung cancer, heart disease, emphysema—and other serious diseases in smokers. Smokers are far more likely to develop serious diseases, like lung cancer, than non-smokers. *There is no safe cigarette...*.Philip Morris USA agrees with the overwhelming medical and scientific consensus that cigarette smoking is addictive. It can be very difficult to quit smoking, but this should not deter smokers who want to quit from trying to do so. (emphasis added) Philip Morris Website; Accessed August 26, 2007).

To reduce the health effects of smoking, the best thing to do is to quit; public health authorities do not endorse either smoking fewer cigarettes or switching to lower tar and nicotine brands as a satisfactory way of reducing risk. (Philip Morris USA website, accessed August 26, 2007).

While Philip Morris gives voice to the public health community's view that lower tar and nicotine (light) brands do not reduce the risk of smoking, the company is careful not to endorse that view. Further, as has been noted (Kozlowski 2005), to say there is "no safe cigarette" still allows the smoker to take false comfort in the mistaken belief that light cigarettes may be "safer."

Respectfully Submitted

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