University of Waterloo STAT 231 – W. H. Cherry

### Figure 11.2. OBSERVATIONAL PLANS: Questions with a Causative Aspect 2

EM9522: The Globe and Mail, May 18, 1995, pages B1, B6

# Smoking probe hazy on packs

Study finds no proof generic packaging hits cigarette habit; groups gird for fight

#### BY BARRIE McKENNA Parliamentary Bureau

OTTAWA – A federal study on the merits of making generic packaging of cigarettes mandatory likely is to find that the proposal has merits even though there is no proof it would actually curb smoking.

It is impossible to prove conclusively that plain packaging will get smokers to quit or to deter young people from staring, said one of the study's authors, demanding anonymity.

But the researcher added that lack of proof does not mean the policy would not be effective – particularly in deterring children from smoking – if used in conjunction with other preventive measures, such as higher tobacco taxes, advertising restrictions and education.

"Behavioural sciences are not like physics or chemistry," the expert said. "As long as there is reasonable probability that doing something will lead to [results], that's enough to initiate public policy. You don't have to prove beyond a reasonable doubt as you would in the medical sciences."

The study – titled When packages can't speak: Possible impacts of plain and generic packaging of tobacco product – is the result of months of work by seven packaging, advertising and behavioural experts hired by Health Canada.

Its findings will be released tomorrow by Health Minister Diane Marleau, who went out on a limb last year by endorsing plain packaging only to run into flak from the industry and within cabinet. She later said she wanted to see the results of the study before pushing ahead with legislation.

The cornerstone of the \$300,000 study was a national survey of hundreds of Canadians to determine how the measure would affect behaviour. Researchers also looked at

possible packaging designs and the likely response of the packaging industry to any new law, conducted focus groups, reviewed previous studies and did a statistical analysis.

But anti-smoking groups fear the study's findings will be so lukewarm that the government will drop the plain packaging idea – at least until the Supreme Court of Canada rules later this year on the legality of an existing ban on all tobacco advertising.

"That's precisely our concern: that this study will be an excuse to let the issue drop," said Garfield Mahood, president of the Non-Smokers' Rights Association.

The anti-smoking lobby, which has been pushing Health Canada to act, has warned it won't give up on plain packaging without a fight. Mr. Mahood said few people thought the former Tory government would ban tobacco advertising, as it did in 1988.

"We think that before the dust settles we are going to win this one," he said. "We are not prepared to abandon something that has the potential to be such a winner for public health"

Mr. Mahood said health groups are trying to get the initiative back on track by highlighting what they say is a sharp increase in smoking since Ottawa lowered taxes last year. They also plan to release research of their own.

"I think this minister would like to have plain packaging reform," Mr. Mahood said. "Other interests in the government may want to run away from it. But she's on-side."

The tobacco industry also is trying to discredit the as-yet-unseen Health Canada study.

Marie-Josée Lapointe, spokeswoman for the Canadian Tobacco Manufacturers Council, said "it's a fool's game" to try to prove an assumption about smoking behaviour with an untried measure, such as plain packaging. "It's bad policy, it's bad politics and it's bad science," said Ms. Lapointe, who speaks for the three Canadian cigarette makers – Imperial Tobacco Ltd., Rothmans Benson & Hedges Inc. and RJR Macdonald Inc. "It's not public policy that will benefit the national interest, any way you look at it."

Canadian tobacco companies sold 58 billion cigarettes last year, generating roughly \$2-billion in after-tax revenue.

Even with the new study in hand, the thorniest issue for the government is not smoker behaviour. It's the threat of legal action from tobacco companies. Canadian cigarette makers, all of which are part-owned or controlled by foreign multinationals, have warned that any move to restrict or outlaw the use of their trademarks would violate domestic and international laws.

To protect themselves, tobacco companies have been carefully registering as trademarks everything that appears on a cigarette pack, including the colours, logos, brand name and any other markings. Rothmans Benson & Hedges Inc., for example, recently launched a new brand – Canadian Classics – and registered the tag line "100 per cent Canadian tobacco without additives" as part of its trademark.

Also girding for a fight is a coalition of packaging and printing companies that has warned that as many as 1,200 jobs will be lost across Ontario if those glossy, four-colour packages are replaced with plain black-and-white lettering.

But a spokesman for the group said the government may be working on a plan for so-phisticated or even multicolored plain packaging.

"The government may be happy about mucking up the waters on plain packaging like that," said the spokesman, Gary Majesky.

- Describe concisely the Question that is the primary matter of concern in the two articles reprinted in this Figure.
  - Identify the *response* variates mentioned in the articles and the focal *explanatory* variate.
  - Comment briefly on the meaning of the word *proof* as it is used in the article reprinted above.
- 2 In the fifth paragraph of the right-hand column of the article reprinted overleaf on page 11.4, it is stated that ..... 5.6 per cent of teens believe that making packages less colourful is the best way to get them not to smoke. Describe briefly the main statistical issue raised by this statement.
  - What *other* information in the article bears directly on this matter? Explain briefly.

(continued overleaf)

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# Marleau soft-pedals cigarette report

### Study supports plain packaging

#### BY BARRIE McKENNA Parliamentary Bureau

OTTAWA – A federal plan to require plain packaging of cigarettes could still be years away, even though an exhaustive government study concludes it would be an effective antismoking tool.

Health Minister Diane Marleau released the study yesterday, but quickly soft-pedalled an earlier commitment to push ahead with legislation when she had the research in hand.

Ms. Marleau, whose political reputation is riding on the plain-packaging issue, now says the 423-page Health Canada study is just another step in a consultation process.

She said she won't do anything about plain packaging for now, acknowledging that more work is needed to convince the provinces, other departments and even her cabinet colleagues that plain packaging is good policy.

"I needed all the ammunition I could get," and the study is "one more piece of ammunition in my arsenal," she told reporters in Ottawa. "If we just keep working at it ..... if enough of us believe it's the right thing to do, we'll find a way of doing it."

Topping the list of those angered by the study is Tory MP Elsie Wayne, who demanded an apology yesterday from Prime Minister Jean Chrétien for the unauthorized use of her picture.

Ms. Wayne, whose picture was shown to focus groups as an example of "an older, heavier set, grey-haired female" as part of an image-identification experiment, does not dispute the accuracy of the description. But she said Health Canada never asked permission to use the photo, and she's offended.

"I am appalled that the Health Minister would use government research and public funds to stereotype a member of Parliament, said Ms. Wayne, who wants "an accounting" of how her photo wound up in the study.

Ms. Marleau's soft-pedalling triggered an angry response from antismoking advocates, who complained that the government has all the scientific evidence it needs but lacks the political backbone to take on the tobacco industry, which employed more than 10,000 people, including growers, in 1994. Cigarette sales generated \$4.9-billion in taxes for Ottawa and the provinces last year.

"This government will go to extraordinary lengths and set an international precedent to save young turbot and assure the future well-being of the fish stock," said David Mair, associate director of the Canadian Council on Smoking and Health.

"For this government to ignore these results and permit the tobacco industry to continue luring tens of thousands of children into tobacco addiction is the equivalent of handing the nets to the Spanish fleet and wishing them good fishing. It will assure death and destruction on a mammoth scale."

Mr. Mair later suggested that plain-packaging legislation may not see the light of day until the end of the current Liberal government mandate in 1998, or even the beginning of the next mandate.

Garfield Mahood, executive director of the Non-Smokers' Rights Association, said Ms. Marleau is clearly delaying while she tries to get the rest of the cabinet on side.

"I don't think there's any question we're engaged in a stall here," he said. "There are no legal reasons this government can't act. The reasons are political, not legal."

For their part, tobacco manufacturers said the study is fatally flawed, and urged Ottawa to immediately scrap the whole idea of plain packaging.

"It fails to recognize the fundamental reality that consumers smoke cigarettes, not packages," said Marie-Josée Lapointe, spokeswoman for the Canadian Tobacco Manufacturers Council. The group speaks for Canada's three cigarette makers, Imperial Tobacco Ltd., Rothmans Benson & Hedges Inc. and RJR-Macdonald Inc. The industry argues that packaging merely gets people to switch brands, not to start smoking.

Ms. Lapointe said the study does not address the fundamental issue – does packaging induce people to smoke?

"The study is filled with mights, couldbes, maybes and perhapses," she said. "And the basic premise is not even examined."

For the study, researchers also looked at possible packaging designs and the likely response of the packaging industry to any new law. It conducted focus groups, reviewed previous studies and did a statistical analysis.

Among the key findings and conclusions in the report, which included a survey of

1,200 young Canadians aged 14 to 17:

- Plain packaging would likely decrease the incidence of teens taking up smoking, and increase the incidence of teen and adult smokers quitting.
- Denuding packages of their brand markings would curb the ability of consumers to associate positive images with particular brands.
- More field experimentation under controlled conditions is needed to determine the extent of plain packaging's likely impact.
- Only 5.6 per cent of teens believe that making packages less colourful is the best way to get them not to smoke.
- Between 30 and 40 per cent of teens believe generic packaging would make a difference, but a small one.

Dr. John Liefield, one of seven marketing and behavioural experts who took part, said no amount of study can accurately predict what degree of impact plain packaging might have on tobacco use.

"You're asking about degrees and how much," he said. "Even the physical scientists can't answer that question. We can point to a direction of effect in the behavioural sciences...... If we really wanted to measure the degree, then we would have to try it and see what happens."

But in the end, Ms. Marleau's biggest headache may not be behavioural science, but the law

Canadian tobacco companies, all partly owned or controlled by multinationals, have warned the government that any move to infringe on their trademarks would violate international trade deals, and that they would seek hefty damages.

An aide to Trade Minister Roy MacLaren said the department will not have a "definitive" legal opinion on the companies' assertions until it sees proposed legislation.

As well, Ms. Marleau said a pending decision by the Supreme Court of Canada on the legality of the federal ban on tobacco advertising will determine the fate of the plain-packaging initiative.

Packaging and printing companies said yesterday that any move to get rid of glossy, coloured cigarette packs would cost up to 1,200 jobs in Ontario.