Figure 3.5f. SAMPLE SURVEY DESIGN/EXECUTION: Proxy Response

EM9353: The Globe and Mail, November 2, 1993, pages A1 and A2

Myth of poor worker training attacked

Study challenges belief Canadian firms provide less education than foreign competitors

BY ALAN FREEMAN
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OTTAWA – A new study says it is a myth that Canadian employers provide less training to their workers than those in other industrialized countries.

The study, by Ottawa economist Constantine Kapsalis, says new figures show that employee training is "fairly extensive" and, in the view of employees, is sufficient.

"Moreover, there is no evidence that Canadian employers train less than employers in competing countries," Mr. Kapsalis said in an article in the most recent issue of the *Canadian Business Economics* journal.

The belief that Canada does poorly in employer-provided training has been accepted as a given in government and political circles.

Citing international comparisons, the 1991 report on Canadian competitiveness by Harvard management professor Michael Porter said "investments by Canadian firms in worker training fell well short of levels registered in the U.S., Germany, Japan and many other advanced countries."

In its policy book released during the recent election campaign, the Liberal Party cited poor investment in training as a reason to promote an extensive new apprenticeship program.

But Mr. Kapsalis said in his analysis of Statistics Canada's annual Adult Education and Training Survey that much of this perception may be a myth resulting from methodological problems in that survey.

Mr. Kapsalis, who is a staff economist for the government-supported Canadian Labour Market and Productivity Centre, said he did the analysis and wrote the article independently.

In Statscan's 1990 survey, 14 per cent of employees said they participted in employer-supported training. But in the same survey a year later, that proportion jumped to 30 per cent.

The problem is that prior to 1991, the survey was conducted on a household basis, Mr. Kapsalis said. If a worker was absent, the question about training was asked of another member of the household. In fact, more than half of the responses to the survey were so-called "proxy" responses.

In 1991, Statscan changed its survey method and obtained all information about training from the respondent. Mr. Kapsalis said that had an enormous impact on the quality of the responses.

The 1991 survey shows that 30 per cent of Canadian employees participated in employer-supported programs and courses in 1991, excluding informal on-the-job training. That compares with 29 per cent in France, between 31 and 37 per cent in Japan and 31 per cent in the United States.

A further 18 per cent of employees participated in programs and courses on their own with no employer support.

Furthermore, Mr. Kapsalis said Canadian employees benefit from an education system that is more accessible than that of any other country in the Organization for Economic Co-operation and Development, which includes 24 of the world's industrialized nations.

He said Canada has the highest post-secondary enrolment rates in the world. Germany, which is often cited as an example that Canada should emulate, has one of the lowest.

"This suggests that what is unique about Germany is not its overall level of education and training effort but rather its preference for workplace training over institutional education," Mr. Kapsalis said.

"In Canada and the U.S., we rely more on the public education system, our community colleges and universities, to handle training," he said in an interview.

In fact, full-time enrolment in Canadian community colleges increased to 12.4 per cent of the population between 18 and 21 years of age in 1990-91 from 11.4 per cent in 1982-83. In the same period, full-time university enrolment rose to 17.3 per cent from 11.8 per cent.

The study also reports that only 13 per cent of employees surveyed felt they needed more education or training but did not take it. Of those, 42 per cent said they were simply too busy.

Gordon Betcherman, a labour economist at Queen's University, said that despite Mr. Kapsalis's conclusions, he isn't convinced Canadian employers are doing enough when it comes to training. He mentioned a separate survey of employers indicating that four out of five companies still don't have a formal training program.

"One way or another a lot of people are getting training," he said. "But I still suspect that Canadian employers are not training enough."

Nevertheless, Mr. Betcherman said it's time the debate moved away from arguing over how much training is being done to focusing on the quality of that training and whether it's aimed at the right people.

Mr. Kapsalis agreed that while there may be enough resources committed to training, that doesn't mean there aren't problems with how those resources are used, in the same way as there are problems with the use of educational resources.

"We know that we are spending more than everyone else in the world on education, but in math tests we're not doing as well as the Japanese or the others."

REFERENCE: Kapsalis, C.: *Canadian Business Economics* **1**(#4): 108-109 (Summer, 1993). [Arts Library call number: PER HC111.C35X]

☐ Identify the main *statistical* issue involved in the article EM9353 reprinted above.

- Describe briefly the source of the difficulty and its resolution.

(*continued overleaf*)

A broadly similar (mis)measurement problem to the one described in the article EM9353 reprinted overleaf on page 3.39 is a major theme of the article EM9412 reprinted below, although the problem probably occurs in the context of a *census*, rather than a sample survey, of French death certificates.

EM9412: The Globe and Mail, September 16, 1994, page A16

HEALTH WATCH

The attack on red wine's hearty reputation

Try not to lose heart, all of you who like to keep your burgundy in the medicine cabinet. But here is some bad news from Bernard D. Kaplan, the Hearst News Service correspondent in Paris.

IT has been called the world's favourite health theory: The claim that drinking red wine with meals, as the French do, helps to prevent heart disease.

But now a group of leading cardiologists has come along to debunk the idea as having no basis in fact.

An international cardiology convention, sponsored by the World Health Organization, has just released a study casting serious doubt on the notion that the French suffer fewer heart attacks than other people because of their liking for a carafe or two of wine with dinner.

The theory has gained wide acceptance in recent years, especially in North America, where it has been credited with spurring a surge in red wine consumption.

The trouble is that the statistics underlying the claim have been found to be unreliable, according to cardiologists from 21 countries meeting in Berlin.

They say the belief that heart ailments are markedly less common in France than elsewhere is a myth.

"The truth is not that heart disease is less prevalent among the French, but that many deaths in France from heart attacks simply aren't reported that way," says British cardiologist Hugh Tunstall-Pedoe, one of the report's authors.

The medical investigators discovered that, every year, thousands of fatalities caused by cardiac arrest are officially put down to "sudden death", with no further details given, on French death certificates.

"The law in most other countries requires a specific cause of death to be stated. Not so in France", explains Dr. Tunstall-Pedoe. "When French heart disease statistics are adjusted to take account of this discrepancy, the incidence (of heart disease) is not much different from that of other advanced nations".

However, subscribers to the red wine theory can, ah, take heart from the medical specialists' readiness to accept that consuming small amounts of alcohol on a regular basis helps to protect the ticker.

"Numerous well-documened studies have suggested this to be the case", says Dr. Tunstall-Pedoe. "But there's no real proof that red wine, as such, does a better job than other forms of alcohol.

The news deals a body blow to the French contention that their lifestyle is not only more civilized than other peoples', but healthier, to boot.

Many outside France were amazed by data seeming to suggest that a nation noted for its love of rich food and incessant smoking, coupled with an aversion to exercise, had such a low rate of heart disease.

Abroad, the belief arose that the French owed it all to red wine because, in fact, it contains a powerful variant of a chemical that keeps clots from forming in blood vessels. Blood clots are a leading cause of fatal heart seizures.

It was a theory that the French wine industry was happy to endorse.

French comic Patrick Marc, a noted bon vivant, says that he wasn't all that surprised when the physicians' findings questioned the therapeutic value of red wine.

"I myself was always doubtful", he explains. "It was too good to be true".

The two newspaper articles EM9353 and EM9412 reprinted overleaf on page 3.39 and above are also used in Figure 8.8f of the STAT 220 Course Materials, in Chapter 4 of the STAT 231 Course Materials and in Statistical Highlight #13.