

## 1.15 Canada – the Print Measurement Bureau

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PMB, the Print Measurement Bureau in Canada, is a tripartite, non-profit making body comprising equal representation from advertisers, their advertising agencies and magazine publishers. Its only function is the measurement and reporting of magazine readership and related data, and it is the sole source of such information in Canada.

We have however, two unique and very substantial problems. The first is that the country is by all standards absolutely immense, with a concomitant widely dispersed population. The second, and often even more vexing problem to researchers, is the existence of two separate and distinct universes – namely the French-speaking and English-speaking population of the country.

Research of the nature and scope of a widely based media consumption survey such as PMB, must always take these two factors into consideration at the very first level of planning. I shall describe below the methodology that we employ and, specifically, the manner in which we attempt to overcome these two peculiarly Canadian characteristics.

Consumption of magazines in Canada is slightly higher than that of the United States; a fairly substantial part of it is made up of regional magazines and city-based publications with geographically limited circulation. In fact, something over 40% of the magazines measured in English Canada belong to this particular category. This obviously complicates a study of this nature.

The size of the country and its regionality makes the sample design therefore critical. PMB III sample was a national stratified disproportionate area probability cluster sample, using 1976 census data. In the first stage, we drew from a frame of more than 35,000, a little over 2000 census enumeration areas (EA's) as our primary sampling units (PSU) and from those enumeration areas, the smallest reporting unit available from census information, we selected nearly 20,000 households. Subsequently, one eligible individual 12 years of age and over was selected randomly from each household, providing ultimately an interviewing frame of 18,440. A total of 12,190 personal interviews were conducted.

I said that this was a national sample, but in truth, the areas of the farthest Northern reaches of Canada, generally those above the 50th parallel of latitude (although in Western Canada, this became the 55th parallel) were excluded. A quick look at a map of Canada

and a graph of distribution of population within the country will obviously suffice to explain the need to exclude these areas.

The sample was stratified on the basis of region and community size. The largest centres in Canada – Toronto, Montreal and Vancouver – were over-sampled, and a further over-sampling was conducted on the basis of educational attainment within certain EA's in all urban markets in Canada. These over-samplings increased the probability of selection of these 'upscale' areas, considered to be the prime consumers of magazines, by a factor of three. This effect was reversed, of course, in the weighting process, but it assured an increase of in-tab respondents for most magazines.

Overall, it was hoped the sample design would help provide a national response rate in excess of 65% without substantial regional variations within that rate. It appears that, in fact, we have achieved that objective. The national response rate came out at 66.1%. In the three major markets, Montreal, Toronto and Vancouver, the response rate averaged 57.6%. This can, in part, be attributed to the fact that, in those areas only, a pre-listing of respondents was conducted. A letter was mailed to each selected household announcing the study and soliciting co-operation when the interviewer called. Since no substitution was allowed, this procedure, while tightening the selection process, may have affected reported response rates.

The collection of data was subsequently conducted in two stages. A personal face to face interview was the first stage. During this process, data was collected on the readership of all magazines in the study that had any distribution within the geographical area being surveyed. In addition, we asked questions concerning their consumption habits of other media – specifically, hours tuned to television and radio, read yesterday data on daily newspapers and exposure to weekend newspapers. All major components of demographic data were also collected here.

The second portion of the interview process was a self-administered leave-behind product usage questionnaire. At this point, let's look at each section in detail.

Before entering the field, PMB conducted a pilot study to determine in the field, the relative consistencies in measuring readership by the two techniques under consideration – the modified through-the-book which had been used in PMB II, and recent reading. The specific

findings of that are discussed elsewhere.

It suffices to say here that after examination of these results, and further reassessment of the requirements of PMB, it was decided that a modified through-the-book technique would be used.

During the interview, all respondents were asked to screen in from screening cards which consisted of two recent, but not current, covers of the magazine in question, at full size and pasted on a black background. On having answered "yes" or "not sure" to the question, "Do you happen to have read or looked into any past or present issues of 'X' magazine at any time over the past six months", they became eligible for the readership question. This screening question is designed to allow the respondent the opportunity of claiming occasional readership or familiarity with the magazine, while eliminating from further consideration, individuals who, in all probability, would not qualify as average issue readers. After having been asked on the basis of a stripped down version of the magazine (no more than 15 pages), using the pretext of interest in certain types of editorial, the standard through-the-book readership question namely, "Now that you have been through this issue of magazine 'X', please tell me whether you have ever read or looked into *this particular issue* before? Remember, we are interested in this specific issue of magazine 'X'." Respondents were graded "yes", "no", and "not sure" and only those with a "yes" answer were now considered to be average issue readers of this particular magazine. All readership now relates only to this one category.

The interview then proceeded through source of copy, frequency of reading and location of reading questions, followed by a number of qualitative questions (namely, interest level in the magazine, number of occasions read of any specific copy, and the total time spent reading of any issue). The source of copy question enabled us to tabulate primary and secondary or total audience separately, and the primary/total audience dispute has greater importance in Canada than in most other countries. This was done for each magazine individually before returning to the readership question for the next magazine screened in.

Although there were some 47 magazines eligible nationally, the maximum number in any given area was 31. In spite of this substantial number, there appeared to be relatively few cases of interview termination due to determinable respondent or interviewer fatigue. Generally, the respondent interview was about 45 minutes in length.

Upon completion of the interview, the interviewer asked the respondent to fill in a fairly lengthy product-usage questionnaire. An incentive of \$5.00 was offered and date and time arranged for the interviewer's

return to the respondent's household to collect personally the completed product questionnaire. The questionnaire came in two versions, male and female, although the differences between the two were very minor, primarily in the area of feminine hygiene products. Questions were asked of all respondents on some 26 product fields containing over 670 separate categories. Very often, both frequency and quantity of usage were asked in order to satisfy the need of the advertisers and their agencies. In addition, we put in this leave-behind question relating to preferences in broadcast programme type which can be related to the hours-tuned questions in the personal interview, and we asked psychographic and a number of lifestyle questions.

Well over 80% of all those who completed a personal interview also completed a product profile questionnaire. This was a substantial improvement over previous studies. All questionnaires, personal and product profile, were translated from the English original into French and then re-translated by a different translator from French back to English. The secondary English version was then checked against the original in order to ensure that the intent of the question was accurately relayed. This had not been the case for some critical questions in the previous study, which led to inflated numbers in some instances.

Validation of the results was carried out at several levels. At the first stage, field supervisors in each region conducted a telephone verification of the completed questionnaire and these questionnaires were subsequently marked. The fieldwork supplier, from its head office in Toronto, then conducted a further validation of both verified and previously unverified questionnaires. At the last stage, some 10% of all completed questionnaires were then revalidated by an independent research organisation. This validation was carried out by telephone and was a brief check on the accuracy of certain key pieces of demographic information. In all instances where an apparent error existed, the complete assignment was validated.

In total, of well over 12,000 completed questionnaires, only 44 appeared to be in error sufficiently to be submitted to a special sub-committee of the Technical Committee. Of those, 37 (or 0.3%) were eventually discarded and removed from the frame. This would indicate that the validation procedure succeeded in what it was intended to do.

Throughout the process, both manual and computer editing programmes were conducted on the data. At several stages, exception reports were generated that indicated questionnaires where impossible answers had been achieved. These questionnaires were then re-edited to eliminate such possibilities. The data was then key-punched and sent to

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yet another supplier for data processing.

At this point, the weighting was applied. This consisted of the first stage of reversing the increased probability of selection of certain strata such as community size and educational attainment and applying household weighting levels. A weighting matrix which consisted of 720 cells had been previously established and this matrix was then applied individually to each respondent to produce population weighting. All available checks were done against the data to ensure that the weighting procedure accurately reflected the real world and this was conducted to the satisfaction of the Technical Committee. In the final analysis, each respondent carried an average weight of 1585.

Prior to the application of the final household size weights, we conducted a cross-check to circulation for each magazine in each of eight geographic areas. The ratio of actual to survey found circulation was then applied to the primary audience of each magazine region by region.

This corrected figure was then reported as the primary audience for that magazine. The same procedure was not, however, applied to the total audience figure and this has very occasionally resulted in the bizarre situation where in any given region, a magazine with a low cross-check and a small secondary audience has a larger corrected primary audience than found total audience.

This anomaly of 'negative secondary' has received a substantial amount of discussion, but no workable solution is, as yet, in sight.

Once the data tape had been edited, weighted and structured, it was turned over to the major data software suppliers, specifically IMS and Telmar, and is currently on-line to all subscribers of the data base. In addition, four volumes of printed data were made available to all PMB subscribers. The volume of such data was indeed extremely large in that it entailed something in the neighbourhood of 58 megabytes.

This has been a very brief description of a study that was 18 months in the planning and almost a year in the field. However, a complete copy of the Technical Appendix which is some 60 pages in length is available to interested enquirers.

We did encounter certain problems which I would like to bring to your attention. Perhaps the most important one was the number of magazines which had to be measured in the survey. As mentioned previously, there were, in total, 47 magazines and the province of Quebec and the capital area of Ottawa/Hull, both English and French publications were included in the interviewer's kit. This meant that any individual respondent could be asked up to 31 screening questions, and a bilingual, heavy consumer of magazines

subsequently could have been asked the readership, qualitative, frequency and source of copy questions 31 times. This never apparently occurred, but the possibility remains. The pressure to measure more magazines as more are launched has become increasingly great on the organisers of PMB, and the first question that must be addressed in any future study is the readership technique to be employed so that as many magazines as possible can be accurately measured. This, no doubt, falls on receptive ears in this room in that it is a problem encountered in a large number of nations and their readership surveys.

Furthermore, because Canada is so ethnically, culturally, linguistically and geographically diverse, it is important for an organisation such as PMB to bear in mind that regional needs don't always coincide with national ones. The political ramifications are great of having under-sampled a specific area of French Canada or more recently, of Western Canada, both of whom feel that central Canada, specifically Toronto, tends to misjudge their needs.

Regardless of politics, the influx of regional and city based magazines has necessitated increasing the sample size in those areas in order to achieve a minimum of 100 in-tab respondents for any of the measured books and obviously, an increase in sample demands an increase in cost.

A third and equally important consideration is the timing of studies. Prior to the formation of PMB in 1971, several independent studies were conducted, but in the decade of the seventies, only three major studies were undertaken – PMB I in 1972, PMB II in 1976 and PMB III which has just recently been released. This is obviously insufficient to meet the needs of either advertiser or publisher, and a great deal of discussion has taken place concerning the possibility of introducing a rolling study which would update an existing data base on an annual basis. Also in the latest version of PMB, in order to stay within a budget of \$1,300,000, it was decided to allot various portions of the study to independent subcontractors. This meant that sampling, fieldwork, validation, data entry and data processing were all handled by different private corporations. The difficulty of maintaining adequate communications among them, and with PMB, certainly delayed the release of the data by some months. In after-thought, it may also not have saved any money. PMB is therefore currently investigating the possibility of using a permanent field force which would coincide very well with a rolling study, mentioned just now.

Specifically, within PMB III, there were further problems which arose out of changes in the various publications measured. Two magazines ceased publication, one major national magazine changed its

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name midway through the study and two newspaper supplement magazines were folded together to form a third and renamed publication. These were compounded by several major labour strikes and format changes. These kinds of problems may not be peculiar to Canada, but they nonetheless put a tremendous strain on the entire structure of PMB.

However, it is not good to dwell on the difficulties of a study that has produced a very large number of positives. PMB is the most comprehensive and

all-encompassing of the media studies in Canada. It is, by far, the most expensive and provides the largest amount of product and other media data. We have, on the whole, been able to meet the challenges of a diverse ethnic population, lightly scattered throughout the second largest nation in the world, speaking and reading two official languages, and maintaining a regional nationalism. PMB III has done well and we expect that PMB IV will do even better.