Govemment of Canada
Department of Communications

INCREASES IN THE PRICE OF
MAGAZINE SUBSCRIPTIONS

## Etude de recherche

# CONSUMER SENSITIVITY TO INCREASES IN THE PRICE OF MAGAZINE SUBSCRIPTIONS 

SEPTEMBER 19, 1986


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This is one of five Arts Policy Background Studies which form part of the evaluation of Cultural Sovereignty.

This study was conducted by the The Coopers \& Lybrand Consulting Group for the Program Evaluation Division of the Department of Communications Canada.

The views expressed herein are those of the author and do not necessarily represent the views or policies of the Department of Communications.

## DEPARTMENT OF COMMUNICATIONS

$2 /$ CONSUMER SENSITIVITY TO INCREASES IN THE PRICE OF MAGAZINE SUBSCRIPTIONS

September 19,1986

Submitted to: Mr. Robert Letellier
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The
Coopers
\&Lybrand
Consulting Group
Management Consultants

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## CONSUMER SENSITTVITY TO INCREASES

IN THE PRICE OF MAGAZINE SUBSCRIPTIONS

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## EXECUTIVE SUMMARY

## INTRODUCTION

In late February - early March, 1986, a telephone survey of 739 Canadian households was conducted to ascertain consumer sensitivity to increases in the price of magazine subscriptions. The Coopers \& Lybrand Consulting Group examined magazine subscription characteristics, factors assocaited with the number of magazine subscriptions received and the annual expenditures on these subscriptions, and price sensitivity with respect to magazine subscriptions. At a minimum, the results of the magazine subscriber telephone survey are accurate to plus or minus 3.6 percentage points, 95 times out of 100 .

## Highlights of the Study

The major findings and conclusions of this study are presented in the following sections.

## A. MAGAZINE SUBSCRIPTION CHARACTERISTICS

* About 2 of 5 households surveyed had subscribed to at least one magazine. The average and median number of magazine subscriptions was 3 and 2 . respectively. The average and median annual expenditures by households on magazine subscriptions were $\$ 60$ and $\$ 40$. The six most frequently reported magazine titles, which accounted for about $44 \%$ of all magazines reported, were Chatelaine, Reader's Digest, MacLean's, Vational Geographic, Time and Actualité. When respondents were asked if their subscription titles were printed or edited in Canada. they indicated that about 7 of 10 of their subscriptions were "Canadian". Since this relates only to magazine subscriptions, the results should not be interpreted as a reflection of the total market for periodicals in Canada. Most of the titles reported had been subscribed to for longer than 2 years.


## B. FACTORS ASSOCIATED WITH NUMBER OF MAGAZINE SUBSCRIPTIONS

* The number of magazine subscriptions reported by households were significantly related to the number of adults and children in the household, the language spoken most frequently at home, the respondent's age, the person's level of education, and gross household income. Among those who reported the highest average number of magazine subscriptions were households with 3 adults or 5 children, English speaking people, people aged 45-54, those with a post-graduate degree, and households with gross annual income of $\$ 60,001-\$ 70,000$.


## C. FACTORS ASSOCIATED WITH ANNUAL EXPENDITURES ON MAGAZINE SUBSCRIPTIONS

* The respondent's education, gross household income, language most often spoken at home, and the number of adults in the household were the factors most significantly associated with annual expenditures on magazine subscriptions. The highest average annual expenditures on magazine subscriptions were reported by households with 5 adults or 5 children, by people speaking languages other than French or English most frequently at home, by those in the 45-54 age groups, by people with some university education, and by households with gross annual income exceeding $\$ 80.000$.


## D. PRICE SENSITIVITY WITH RESPECT TO MAGAZINE SUBSCRIPTIONS

* Demand for magazine subscriptions is price elastic in every price range. That is, for every $1 \%$ increase in the price of magazine subscriptions there would be a $3.1 \%$ decrease in the quantity of magazine subscriptions demanded by consumers. Canadian periodical subscriptions, with an overall price elasticity of $3.7 \%$,' were more price elastic than all subscriptions considered together. The least price sensitive Canadian subscriptions were those costing less than $\$ 10$. while the most price sensitive ones were $\$ 40$ or more.
* Analysis of price sensitivities from a marketing/sociological perspective. i.e., "bailout values" analysis, also indicated that magazine subscription purchases are sensitive to increases in price. For all periodical subscriptions. even a $10 \%$ increase in their prices would result in about one-quarter of respondents deciding against repurchase. If prices were to increase by $20 \%$ over the original subscription price. half of those interviewed would not have repurchased their magazine subscriptions while the other half would have repurchased. As did the economic analysis, the bailout approach found that price sensitivites were consistent across Canadian and foreign periodicals. Respondents who received their periodicals for less than 2 years were noticeably more price sensitive than longer-time subscribers. Furthermore, females were significantly more price sensitive than males.
* Sensitivity with respect to increases in the price of magazine subscriptions was significantly associated with annual household expenditures on subscriptions, and the length of time which people received their magazine subscriptions.
* The most significant socio-demographic characteristics associated with price sensitivity of magazine subscriptions were language spoken most frequently in the household, number of children in the household, age of the individual, number of adults in the household, educational attainment. gross annual household income, and employment status. Those most sensitive to magazine subscription price increases were households with six adults, one child, where English was the predominate language spoken. people aged 45-64, individuals with primary school education or less, homemakers, and households with gross income in the range of \$30.001$\$ 40.000$.
* In the face of noticeable price increases, Canadian magazine subscriptions, as well as those subscribed to fewer than 2 years, would be dropped first.
* Canadian magazine subscriptions would be the first to be dropped by households where languages other than English or French were used most frequently, by people in the age group 55-64, by individuals with a college degree or with some post-graduate education, by retired persons, and by households with the lowest gross annual incomes.
* Not surprisingly, if prices increased to the extent that some magazine subscriptions had to be dropped, people who were the least price sensitive would have been likely to hold onto their subscriptions the longest.
* When prices increased to the point where some periodical subscriptions would be dropped, the nationality of the magazine was significantly associated to the time the subscription would be dropped.
* Irrespective of the periodical's nationality, magazine subscriptions which were most sensitive to price increases would have been the first to be dropped. Yet. if prices were to continue to climb to the point where two or three magazines would have to be given up, then people would have held onto Canadian magazines longer than foreign periodicals. Both the price elasticity and bailout values analyses found that the most price sensitive magazine subscriptions were those costing $\$ 40$ or more.


## RÉSUMÉ ADMINISTRATIF

## INTRODUCTION

À la fin de février et au début de mars 1986, une enquête téléphonique auprès de 739 ménages canadiens a été menée en vue de déterminer la sensibilité des consommateurs face à une augmentation des prix d'abonnement aux périodiques. Le Groupe d'experts-conseil Coopers \& Lybrand a étudié les caractéristiques d'abonnement aux périodiques, les facteurs liés au nombre d'abonnements et les dépenses annuelles en abonnements, ainsi que la sensibilité à l'égard des prix des abonnements. Au minimum, les résultats de l'enquête téléphonique auprès des abonnés de périodiques ont un taux de précision de plus ou moins 3,6 points du pourcentage, 95 fois sur 100 .

## Faits saillants de l'étude

Les principaux résultats et conclusions de l'étude sont présentés ci-après.

## A. CARACTÉRISTIQUES DES ABONNEMENTS AUX PÉRIODIQUES

* Près de 2 sur 5 des ménages interrogées étaient abonnées à au moins un périodique. Les nombres moyen et médian d'abonnements étaient 3 et 2 , respectivement. Les dépenses en abonnement moyennes et médianes par ménage s'élevaient à $\$ 60$ et $\$ 40$. Les six périodiques les plus fréquemment cités, représentant près de $44 \%$ de tous les périodiques cités, étaient Châtelaine, Reader's Digest, MacLean's, National Geographic, Time et Actualité. Lorsqu'on leur demandait si les périodiques auxquels ils étaient abonnés étaient imprimés ou publiés au Canada, les répondants indiquaient que 7 sur 10 de leurs abonnements étaient "canadiens". Puisque cela ne se rapporte qu'aux abonnements seulement, les résultats ne devraient pas être interprétés comme une indication du marché total des périodiques au Canada. La plupart des périodiques mentionnés faisaient l'objet d'un abonnement d'une durée de plus de deux ans.


## B. FACTEURS LIÉS AU NOMBRE D'ABONNEMENTS

* Le nombre d'abonnements à des périodiques déclaré par les ménages était étroitement lié au nombre d'adultes et d'enfants que comptait le ménage, à la langue la plus fréquemment parlée à la maison, à l'âge du répondant, au degré d'instruction de la personne et au revenu brut du ménage. Parmi celles qui ont déclaré le nombre moyen d'abonnements le plus élevé, signalons les ménages ayant les caractéristiques suivantes: 3 adultes ou 5 enfants, anglophones, groupe d'âge entre 45 et 54 ans, détenteurs d'un diplôme d'études supérieures et ménages dont le revenu annuel brut se situe entre $\$ 60,001$ et $\$ 70,000$.


## C. FACTEURS LIÉS AUX DÉPENSES ANNUELLES EN ABONNEMENTS

* L'instruction du répondant, le revenu brut du ménage, la langue la plus couramment parlée à la maison et le nombre d'adultes étaient les facteurs les plus étroitement liés aux dépenses annuelles en abonnements à des périodiques. Les dépenses annuelles moyennes les plus élevées en abonnements ont été déclarées par 'es ménages ayant les caractéristiques suivantes: 5 adultes ou 5 enfants, personnes parlant le plus fréquemment à la maison une langue autre que le français ou l'anglais groupe d'âge entre 45 et 54 ans, personnes ayant fait des études universitaires partielles et ménages dont le revenu annuel brut dépasse $\$ 80,000$.


## D. SENSIBILITE DES PRIX D'ABONNEMENT

* La demande en abonnements est caractérisée par une élasticité des prix à tous les niveaux de prix. En d'autres termes, chaque $1 \%$ d'augmentation du coût d'un abonnement entraînerait une diminution de 3.1 \% de la demande. Les abonnements aux périodiques canadiens, dont l'élasticité globale des prix est de $3.7 \%$, accusaient une plus grande élasticité des prix que tous les abonnements pris ensemble. Les périodiques canadiens les moins sensibles aux variations de prix étaient ceux qui coûtent moins de $\$ 10$, et les plus sensibles ceux coûtant $\$ 40$ ou plus.
* L'analyse de la sensibilité des prix d'un point de vue marketing et sociologique, c.-à-d. analyse des valeurs "d'abandon", a également révélé que les achats d'abonnement sont sensibles aux augmentations de prix. Pour tous les périodiques, même une augmentation de $10 \%$ du prix entraînerait près d'un quart des répondants à ne pas se réabonner. Si les prix devaient augmenter de $20 \%$ par rapport à l'abonnement initial, la moitié des personnes interviewées ne renouvelleraient pas leur abonnement, alors que l'autre moitié le ferait. Tout comme l'analyse économique, l'analyse des valeurs d'abandon a révélé une cohérence de la sensibilité des prix entre les périodiques canadiens et étrangers. Les abonnés à des périodiques depuis moins de deux ans accusent une sensibilité plus marquée à l'égard des prix que les abonnés de longue date. Par ailleurs, les femmes sont beaucoup plus sensibles aux prix que les hommes.
* La sensibilité à l'égard des augmentations du prix des abonnements aux périodiques est fortement liée au montant des dépenses annuelles en abonnements du ménage et à la période de temps depuis laquelle les personnes reçoivent leur périodique.
* Les caractéristiques socio-démographiques les plus importantes liées à la sensibilité des prix sont la langue la plus couramment parlée à la maison, le nombre d'enfants du ménage, l'âge de la personne, le nombre d'adultes, le degré d'instruction, le revenu annuel brut du ménage et la situation d'emploi. Les ménages les plus sensibles aux augmentations de prix des abonnements ont les caractéristiques suivantes: 6 adultes, 1 enfant, où l'anglais est le plus couramment parlé à la maison, groupe d'âge entre 45 et 64 ans, études primaires au plus, personnes au foyer et ménages dont le revenu annuel brut se situe entre $\$ 30,001$ et $\$ 40,000$.
* Dans l'éventualité d'une augmentation marquée des prix, ce sont les abonnements aux périodiques canadiens, ainsi que les abonnements d'une durée de moins de deux ans, qui seraient abandonnés en premier.
* Les abonnements aux périodiques canadiens seraient les premiers abandonnés par les ménages où des langues autres que le français ou l'anglais sont les plus couramment parlées, ceux habitées par des personnes du groupe d'âge 55 à 64 ans, par des personnes détenant un diplôme collégial ou ayant fait des études supérieures partielles, ceux habités par des retraités et les ménages ayant les revenus annuels bruts les plus faibles.
* Il n'est pas étonnant que, dans l'éventualité d'une augmentation des prix au point où certains abonnements seraient abondonnés, ce sont les personnes qui étaient les moins sensibles aux prix qui seraient les plus susceptibles de maintenir leur abonnement le plus longtemps.
* Lorsqu'il a été question d'une augmentation des prix au point où certains abonnements seraient abondonnés, il y avait une forte corrélation entre la nationalité du périodique et le moment de l'abandon de l'abonnement.
* Indépendamment de la nationalité du périodique, les abonnements les plus sensibles aux augmentations de prix seraient les premiers à être abandonnés. Néanmoins, si les prix devaient poursuivre leur augmentation au point où deux ou trois périodiques doivent être abandonnés, les répondants ont indiqué qu'ils maintiendraient leur abonnement aux périodiques canadiens plus longtemps qu'aux périodiques étrangers. Tant l'analyse de l'élasticité des prix que l'analyse des valeurs d'abandon ont révélé que les abonnements ayant la plus grande sensibilité de prix sont ceux dont le coût s'élève à $\$ 40$ ou plus.


## I. INTRODUCTION

## A. BACKGROUND

In this report, the findings of a telephone survey of Canadian households conducted during March. 1986 regarding consumer sensitivity to increases in the price of magazine subscriptions are presented and discussed.

The Coopers \& Lybrand Consulting Group carried out the research to provide the Program Evaluation Branch of the Department of Communications with a measure of consumer reaction to increases in the price of magazine subscriptions.

## B. OVERVIEW OF METHODOLOGY

In late February - early March, 1986, a telephone survey of 739 Canadian households was conducted. A stratified random selection procedure was used to selected the households. Households were stratified on the basis of thirteen communities across the country (see list in Appendix I). Sampling selections were made independently according to a technique which generates random telephone numbers. The population studied was Canadian households which subscribed to and received by mail at least one magazine. Within households, the individual to be interviewed was at least 18 years of age and paid for the greatest number of magazine subscriptions in the household. Fieldwork was done during evening hours between February 24 and March 3, from regional telephone facilities that were constantly supervised. See Appendix II for sample disposition.

1. Questionnaire Design

The questionnaires used in this study were designed by The Coopers \& Lybrand Consulting Group and reviewed by the Project Authority of the Department of Communications and by Statistics Canada. The
instruments were pretested in actual field conditions with pretested in actual field conditions with representative respondents, and after the results of the pretest were discussed with the Project Authority. modifications were made. A copy of the questionnaire is included as Appendix III.

## C. RELIABILITY OF RESULTS

## 1. Sample Representativeness

The Coopers \& Lybrand Consulting Group survey attempted to obtain a representative sample of magazine subscribers in Canada. In order to establish the representativeness of our sample of magazine subscribers, we compared the distribution of subscriptions for 16 selected major titles from our survey to the distribution of all subscriptions for those titles, as compiled by Canadian Advertising Rates and Data (CARD). The information presented in Table 1.1 indicates a high degree of association between the data from our sample and from the complete universe of magazine subscriptions (i.e., $r=0.91$, significant at the $1 \%$ level of confidence). Based on these results, it is our judgement that the sample is representative of magazine subscribers. In addition to this comparison, there was an effort to relate our sample to those from recent surveys of magazine subscribers done elsewhere. One 1985 study ${ }^{1}$, the objective of which was to assess the reaction of Canadian periodical readers to higher subscription rates, would have provided a good benchmark for comparison. However, since the data from this particular survey were weighted to reflect the English - French distribution of the Canadian population, the results of our survey and theirs cannot really be compared.

[^0]TABLE 1.1

COMPARISON OF DISTRIBUTION OF MAGAZINE SUBSCSRIPTIONS BETWEEN
SAMPLE IN SURVEY AND CARD ( / ), SELECTED MAGAZINE TITLES ( = )

Subscriptions

| Magazine Title |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | CARD ( ) |  | Sample |  |
|  | Number | \% | Number | \% |
| Actualité | 247,616 | 4.4 | 50 | 5.3 |
| Atlantic Insight | 41,857 | 0.7 | 16 | 1.7 |
| Canadian Consumer | 156,336 | 2.8 | 10 | 1.1 |
| Canadian Living | 262,650 | 4.7 | 32 | 3.4 |
| Chatelaine | 1,312,972 | 23.4 | 252 | 26.9 |
| Coup de Pouce | 78,836 | 1.4 | 17 | 1.8 |
| Equinox | 149,980 | 2.7 | 15 | 1.6 |
| Financial Post | 172,482 | 3.1 | 19 | 2.0 |
| Flare | 24,077 | 0.4 | 22 | 2.4 |
| MacLean's | 630.009 | 11.2 | 144 | 15.4 |
| Newsweek | 69,540 | 1.2 | 29 | 3.1 |
| Reader's Digest | 1,275,437 | 22.8 | 149 | 15.9 |
| Saturday Night | 131,600 | 2.3 | 15 | 1.6 |
| Sélection du Reader's Digest | 353,662 | 6.3 | 38 | 4.1 |
| Time | 315,978 | 5.6 | 103 | 11.0 |
| T.V. Guide | 377,407 | 6.7 | 25 | 2.7 |
| TOTAL | 5,600,439 | 100.0 | 936 | 100.0 |

$r=0.91^{* *}$
(/) CARD refers to Canadian Advertising Rates and Data, December, 1985 edition.
( = ) Magazine titles to which there were at least 10 subscribers at the time of the survey.
** Significant at $1 \%$ level.

* Significant at $5 \%$ level.

Another potential supplementary point of reference for our sample was a broad-based study of magazine reading in Canada which was completed in late 19852. The objectives of this report were to describe the patterns of magazine subscriptions, and to investigate the relationship of magazine reading to leisure and to society. The researcher in this study set out to obtain a representative sample of the Canadian adult population, and the final results of this survey were weighted to reflect the distribution of the Canadian population, as provided by Census data. As a result, data from this and our surveys cannot be compared either.

The magazine telephone survey results are, at a minimum, accurate to plus or minus 3.6 percentage points, 95 times out of 100 .

## D. KEY DEFINITIONS

Throughout this report, there are certain terms of which the reader should be aware:

* "Magazine subscription" refers to periodicals such as Time, MacLean's, Chatelaine, Popular Mechanics, or sorne other type of journal like a business, scientific or religious periodical to which the household subscribed and received by mail. Excluded were magazines sent/distributed free of charge, those paid by someone else, e.g., employer, as well as those received as part of membership in an association;
* "Bailout" is a variable defined in our analysis as the price to which a magazine subscription would have to rise in order for an individual to have a zero percent probability of repurchase. It is expressed as the percent increase over the original magazine subscription price. While

[^1]not price elasticity of demand, per se, there is some relationship between the bailout variable and demand for magazine subscriptions; and

* Elasticity of Demand" is the relative responsiveness of quantity demanded to changes in price. Suppose the price of a good "x" declines by 1 percent. The demand for " $x$ " is said to be price elastic, of unitary price elasticity, or price inelastic according as the quantity of "x" demanded expands by more than 1 percent, by exactly 1 percent, or by less than 1 percent. For example, a price elasticity of -1.5 for " $x$ " means that an increase of 1 percent in the price of " $x$ " tends on average to reduce the quantity bought by 1.5 percent. The formula for calculating price elasticity of demand is:

$$
E p=\frac{\Delta q}{\Delta p} \cdot \frac{p}{q}
$$

where: $E p=$ price elasticity;
$\Delta q=$ change in quantity;
$\Delta P=$ change in price;
$p=$ lower of the two prices; and
$q=$ lower of the two quantities.

## II. MAGAZINE SUBSCRIPTION CHARACTERISTICS

## A. INCIDENCE OF MAGAZINE SUBSCRIBERS

At the time of the magazine subscription, telephone survey was conducted, $39.4 \%$ of households contacted were subscribers to at least one magazine. The Econosult study showed that $35.6 \%$ of households were subscribers to Canadian magazines ${ }^{3}$, and Cosper indicated that $34.1 \%$ of all magazine titles reported by his sample were subscriptions ${ }^{4}$. It would seem, then, that our estimate is a reasonable approximation of the proportion of Canadian households which subscribe to magazines.
B. NUMBER OF MAGAZINE SUBSCRIPTIONS

Survey results showed that households which subscribed to any periodicals received an average of 2.8 magazines ( 739 households reported 2,050 magazine subscriptions). The median number of magazine subscriptions was 2.2. Cosper reported some 3,319 magazine subscriptions or about 1.4 per respondent ${ }^{5}$. The Econosult study indicated that. overall, households received an average of 2.3 periodicals ( 695 households reported. 1,603 magazine subscriptions). 6
C. ANNUAL HOUSEHOLD EXPENDITURES ON MAGAZINE SUBSCRIPTIONS

On average, households in the survey reported spending $\$ 61.22$ per year for magazine subscriptions; the median annual expenditure was $\$ 40.23$. Comparable data from the Econosult and Cosper studies did not exist.

Econosult, op.cit.. Table 1.3.
4 Cosper, op.cit., p. 24.
5 Ibid. These are individuals, not households.
Econosult, op.cit., p.3-14.

## D. TITLES OF MAGAZINE SUBSCRIPTIONS RECEIVED

In addition to asking questions about the total number of magazine subscriptions received and the amount spent on these subscriptions during the year, respondents were requested to provide information on up to five periodicals to which the household subscribed and received by mail. Information on a total of 1,859 magazine subscriptions was reported, for an average of 2.5 periodicals per household. Twenty magazines accounted for about $60 \%$ of all the titles reported (see Table 2.1). The most frequently reported titles of magazine subscriptions were: Chatelaine (13.6\%), Reader's Digest ( $8.0 \%$ ), MacLean's ( $7.7 \%$ ), National Geographic (6.2\%), Time (5.5\%), and Actualité (2.7\%). In fact, these six magazines together comprised almost $44 \%$ of the total subscription titles reported.

A comparison of the Cosper study and ours, on the basis of six selected titles (Actualité, Chatelaine, MacLean's. Vational Geographic, Reader's Digest and Sélection) revealed interesting results. For Cosper. these titles accounted for almost $36 \%$ of periodical titles reported, and in our study these six magazines represented $41 \%$ of all titles indicated (Table 2.2). Based on the earlier discussion of representativeness of our sample (see Section I-C), if Cosper's sample were representative as well, these results should not be too surprising.

## E. NATIONALITY AND LENGTH OF MAGAZINE SUBSCRIPTION

Respondents indicated that $73 \%$ of the magazines on which they reported information were either published or edited in Canada (see Table 2.3). In effect, for those surveyed, this provides an indication of their awareness of the nationality of the subscriptions they had been receiving. These results should not be inferred to the total market for periodicals in Canada, for information was asked and received on subscription only. Of the total magazine titles reported, respondents reported that they had been subscribing to $72 \%$ of them for longer than two years (Table 2.3).

[^2]TABLE 2.1

TOTAL SUBSCRIPTIONS OF SELECTED MAGAZINES WITH
AT LEAST 10 SUBSCRIBERS

| Magazine Title | Number | \% |
| :--- | ---: | ---: |
| Total |  |  |
|  | 1,859 | 100.0 |
| Actualité |  |  |
| Atlantic Insight | 50 | 2.7 |
| Canadian Business Week | 16 | 0.9 |
| Chatelaine | 15 | 0.8 |
| Canadian Living | 252 | 13.6 |
| Canadian Consumer | 32 | 1.7 |
| Coup de pouce | 10 | 0.5 |
| Equinox | 17 | 0.9 |
| Flare | 15 | 0.8 |
| Financial Post | 22 | 1.2 |
| MacLean's | 194 | 1.0 |
| Newsweek | 29 | 7.7 |
| National Geographic | 116 | 1.6 |
| Protegez-vous | 23 | 6.2 |
| Reader's Digest | 149 | 1.2 |
| Saturday Night | 15 | 8.0 |
| Sports Illustrated | 24 | 0.8 |
| Selection | 38 | 1.3 |
| Time | 103 | 2.0 |
| T.V. Guide | 25 | 5.5 |
|  |  | 1.3 |
| Sub-total | 114 |  |
|  |  |  |

TABLE 2.2

COMPARISON OF COSPER(1) AND COOPERS \& LYBRAND CONSULTING GROUP SAMPLES, SLX SELECTED MAGAZINE SUBSCRIPTION TITLES

| Magazine Title | Cosper Report |  | Coopers \& Lybrand Consulting Group |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | \% | Number | \% |
| Total subscriptions | 3,319 | 100.0 | 1,859 | 100.0 |
| Actualité | 65 | 2.0 | 50 | 2.7 |
| Chatelaine | 286 | 8.6 | 252 | 13.6 |
| Equinox | 37 | 1.1 | 15 | 0.8 |
| MacLean's | 257 | 7.7 | 144 | 7.7 |
| National Geographic | 192 | 5.8 | 116 | 6.2 |
| Reader's Digest | 288 | 8.7 | 149 | 8.0 |
| Sélection | 52 | 1.6 | 38 | 2.0 |
| Sub-Total | 1,177 | 35.5 | 764 | 41.1 |

(1) Cosper, op.cit., Table 2.5

## CONCLUSION 1:

Almost 2 of 5 households contacted subscribed to at least one magazine. An average of almost 3 periodicals were received by these households (median number was about 2). The average annual expenditures on magazine subscriptions were slightly higher than $\$ 60$; the median was $\$ 40$. Of the titles which respondents indicated they received, the most frequently reported were Chatelaine, Reader's Digest. MacLean's, National Geographic, Time, and Actualité. These six titles accounted for about $44 \%$ of all magazines reported. Most of the titles were reported as published or edited in Canada. and most had been subscribed to for more than 2 years.

## DISTRIBUTION OF MAGAZINE TITLES REPORTED 2 BY NATIONALITY AND LENGTH OF MAGAZINE SUBSCRIPTION

Nationality ..... $(1,669)$
Published/Edited in Canada ..... 73
Published/Edited Elsewhere ..... 27
Length of Subscription ..... $(1,842)$
Less than 2 years ..... 28
2 years or more ..... 72
III. CORRELATES OF MAGAZINE SUBSCRIPTIONS

## A. FACTORS ASSOCIATED WITH NUMBER OF MAGAZINE SUBSCRIPTIONS

Basic correlation analysis showed that there was a significant relationship between the number of magazine subscriptions received and the number of adults in the household, the age of the respondent, the respondent's level of education, and the gross household income (see Table 3.1). Further statistical analysis (analysis of variance) suggested that, in addition to the number of adults in the households, the age and level of education of the respondent, and gross household income, the number of subscriptions was associated with the number of children in the household and language spoken most often at home (Table 3.2). Further statistically significant differences were found when the average number of subscriptions were compared for a number of subscriptions were compared for a number of socio-demographic characteristics. Table 3.3 summarizes the different average number of subscriptions by socio-demographic characteristics. For example, these results reveal that the average number of subscriptions in households with 3 adults was significantly different than that in households with only one adult. that the average number was significantly different in households with 5 children from those with fewer than 5 children, that the average number received by Anglophones was significantly different from that for Francophones, that the average received by respondents aged 45-54 was significantly different than the average number by younger respondents, that the average number of subscriptions reported by those with a post-graduate degree was different from the number indicated those with some high school or some college education, and that the average number received by individuals in households with gross income of $\$ 60.001-\$ 70.000$ was significantly different from households reporting income of $\$ 50,000$ or less.

## TABLE 3.1

## CORRELATION BETWEEN NUMBER OF MAGAZINE SUBSCRIPTIONS

## AND SELECTED SOCIO-DEMOGRAPHIC CHARACTERISTICS

| Socio-Demographic Characteristic | Pearson Correlation Coefficient | Base ( $\mathrm{n}=$ ) |
| :---: | :---: | :---: |
| Number of Adults | 0.091 ** | (731) |
| Number of Children | 0.017 | (731) |
| Age | $0.105 * *$ | (733) |
| Education | $0.142 * *$ | (729) |
| Household Income | 0.195 ** | (602) |
| Municipality Size | 0.053 | (721) |
| ** Significant at 1\% level |  |  |
| * Significant at 5\% level |  |  |

## ANALYSIS OF VARIANCE BETWEEN NUMBER OF MAGAZINE

## SUBSCRIPTIONS AND SELECTED SOCIO-DEMOGRAPHIC CHARACTERISTICS

| Socio-Demographic Characteristic | F-Ratio |  | Base ( $\mathrm{n}=$ ) |
| :---: | :---: | :---: | :---: |
| Number of Adults | 2.301 | * | (730) |
| Number of Children | 3.348 | ** | (303) |
| Language | 3.373 | * | (736) |
| Age | 3.028 | ** | (732) |
| Education | 3.041 | ** | (728) |
| Employment Status | 1.002 |  | (731) |
| Household Income | 4.326 | ** | (601) |
| Municipality Size | 1.051 |  | (720) |

[^3]
## AVERAGE NUMBER OF MAGAZINE SUBSCRIPTIONS BY SELECTED

## SOCIO-DEMOGRAPHIC CHARACTERISTICS

| Characteristic | Average Number of Magazine Subscriptions | Base ( $\mathrm{n}=$ ) |
| :---: | :---: | :---: |
| Number of Adults |  |  |
| 1 | 2.2 | (100) |
| 2 | 2.8 | (441) |
| 3 | 3.1 *1 | (116) |
| 4 | 2.7 | (50) |
| 5 | 2.9 | (17) |
| 6 | 3.2 | (5) |
| 7 | 5.0 | (2) |
| Number of Children |  |  |
| 1 | 3.1 * | (136) |
| 2 | 2.7 * | (123) |
| 3 | 3.0 * | (30) |
| 4 | 1.9 * | (13) |
| 5 | 10.0 | (1) |
| 6 | 5.0 | (1) |
| Language |  |  |
| English | 2.9 | (552) |
| French | 2.4 * | (170) |
| Other | 2.7 | (15) |
| Age |  |  |
| 18-24 | $2.4 *$ | (94) |
| 25-34 | 2.5 * | (207) |
| 35-44 | 2.8 * | (162) |
| 45-54 | 3.3 | (113) |
| 55-64 | 2.9 | (73) |
| 65+ | 3.0 | (84) |
| Education |  |  |
| Primary School or less | 2.6 | (20) |
| Some High School | 2.1 * | (85) |
| High School Graduate | 2.7 | (235) |
| Some College | 2.3 * | (50) |
| College Graduate | 2.7 | (67) |
| Some University | 3.1 | (61) |
| University Degree | 3.2 | (159) |
|  | 2.6 | (16) |
| Post-graduate Degree | 3.4 | (36) |
| Household Income |  |  |
| \$10,000 or less | 2.0 * | (26) |
| \$10,001-20,000 | 2.4 * | (88) |
| \$20,001-30,000 | 2.2 * | (131) |
| \$30,001-40,000 | 2.7 * | (103) |
| \$40,001-50,000 | 2.8 * | (96) |
| \$50,001-60,000 | 3.3 | (80) |
| \$60,001-70,000 | 4.11 | (23) |
| \$70,001-80,000 | 3.3 | (24) |
| Over \$80,000 | 3.2 | (31) |

[^4]
## CONCLUSION 2:

The number of adults and children in the household, language spoken most of ten at home, age of the respondent, level of education of the individual reporting, and gross household income were significantly related to the total number of magazine subscriptions which households reported receiving. The highest average number of magazine subscriptions received were reported by households with 3 adults or 5 children, English speaking people, those in the age group 45-54, people with a postgraduate degree, and those reporting household income of $\$ 60,001-\$ 70,000$.

## B. FACTORS ASSOCIATED WITH ANNUAL EXPENDITURES ON MAGAZINE SUBSCRIPTIONS

At first glance, it appeared that there was a statistically significant relationship between the annual expenditures on magazine subscriptions and the number of adults in the household, the respondent's level of education, and gross household income (Table 3.4). Analysis of variance revealed that annual expenditures on magazine subscriptions were significantly associated with language spoken most of ten at home, the level of education of the respondent, and gross household income (Table 3.5). Table 3.6 shows average annual expenditures on magazine subscriptions by selected soci-demographic characteristics. The data indicate that average annual expenditure in households with 5 adults were significantly different than those with 1 or 2 adults. Other significant differences noted were between: households with 5 children and those with fewer than 5 children; households where languages other than French and English are used most frequently; respondents aged $45-54$ and those 18-24 and 65 and over; people with some university education and higher and those college education or less; households with gross incomes greater than $\$ 50.000$ and those with gross incomes of $\$ 50.000$ or less.

## TABLE 3.4

## CORRELATION BETWEEN ANNUAL EXPENDITURES ON MAGAZINE

SUBSCRIPTIONS AND SELECTED SOCIO-DEMOGRAPHIC CHARACTERISTICS

| Socio-Demographic <br> Characteristic | Pearson <br> Correlation Coefficient | Base ( $\mathbf{n}=$ ) |
| :--- | :---: | :---: | :---: |


| Socio-Demographic Characteristic | F-Ratio |  | Base ( $\mathrm{n}=$ ) |
| :---: | :---: | :---: | :---: |
| Number of Adults | 1.892 |  | (580) |
| Number of Children | 1.898 |  | (241) |
| Language | 6.348 | ** | (585) |
| Age | 1.708 |  | (581) |
| Education | 3.022 | ** | (581) |
| Employment Status | 0.569 |  | (581) |
| Household Income | 4.930 | ** | (494) |
| Municipality Size | 1.002 |  | (572) |

[^5]
## BY SELECTED SOCIO-DEMOGRAPHIC CHARACTERISTICS

| Characteristic | Average <br> Annual Expenditures | Base ( $\mathrm{n}=$ ) |
| :---: | :---: | :---: |
|  | \$ |  |
| Number of Adults |  |  |
| 1 | 50.13 | (82) |
| 2 | 57.52 | (350) |
| 3 | 75.90 | (86) |
| 4 | 72.88 | (40) |
| 5 | 94.38 | (16) |
| 6 | 60.40 | (5) |
| 7 | 106.50 | (2) |
| Number of Children |  |  |
| I | 61.74 * | (113) |
| 2 | 67.77 * | (92) |
| 3 | 63.85 * | (27) |
| 4 | 35.22 * | (9) |
| 5 | 250.00 | (1) |
| Language |  |  |
| English | 64.38 | (423) |
| French | 48.48* | (153) |
| Other | 122.50 | (10) |
| Age |  |  |
| 18-24 | 48.14* | (77) |
| 25-34 | 62.28 | (179) |
| 35-44 | 61.31 | (130) |
| 45-54 | 77.78 | (95) |
| 55-64 | 54.90 | (49) |
| 65+ | 52.31 * | (52) |
| Education |  |  |
| Primary School or less | 37.00 * | (13) |
| Some High School | 42.39 * | (67) |
| High School Graduate | 55.66 | (172) |
| Some College | 49.69 | (42) |
| College Graduate | 50.17 * | (58) |
| Some University | 87.76 | (54) |
| University Degree | 77.42 | (132) |
| Some Post-graduate | 53.27 | (15) |
| Post-graduate Degree | 72.07 | (29) |
| Household Income |  |  |
| \$ 10.000 or less | 35.22 * | (18) |
| \$10,001-20.000 | 52.44 * | (70) |
| \$20.001-30.000 | 44.96 * | (110) |
| \$30,001-40,000 | 52.28 * | (85) |
| \$40,001-50,000 | 60.01 * | (77) |
| \$50.001-60,000 | 77.79 | (66) |
| \$60,001-70,000 | 95.19 | (21) |
| \$70.001-80.000 | 99.04 | (24) |
| Over \$80,000 | 102.33 | (24) |

[^6]
## CONCLUSION 3:

Annual expenditures on magazine subscriptions were significantly related to the level of education of the respondent, gross household income, language most frequently spoken at home, and the number of adults in the household. The highest average annual expenditures on magazine subscriptions were reported by households with 5 adults, or 5 children, people speaking neither English nor French most often at home, those aged 45-54, people with some university education, and those with gross incomes over $\$ 80,000$.

## IV. PRICE SENSITIVITY WITH RESPECT TO MAGAZINE SUBSCRIPTIONS

## A. PRICE ELASTICITY OF DEMAND

Before discussing in detail the findings of this part of the report, there are some considerations which the reader should bear in mind. First, elasticity measures usually are calculated from actual price and quantity data, i.e., prices of magazine subscriptions and quantities of magazine subscriptions purchases, over time. We thus measure actual consumer behaviour. In this study (as can be seen from the questions asked - see Appendix III) hypothetical consumer behaviour has been used as the basis for deriving measures of price elasticity of demand with respect to magazine subscriptions. The resulting elasticities relate to intentions, not actual behaviour. and likely tend to exaggerate reality. As the reader will observe later, however, in spite of this potential limitation the consistency of all the elasticity measures suggest that the demand for magazine subscriptions is price elastic. Actual elasticities may not be as high as those reported in this study, but it is reasonable to say that they are greater than 1.

Another consideration is the factors which affect elasticity, i.e., the availability of good substitutes for magazine subscriptions, the number of uses to which magazine subscriptions can be put, and the price of magazine subscriptions relative to consumers' incomes. The availability of good substitutes is the most important of these factors. The more good substitutes there are for magazines the more the demand for magazine subscriptions would tend to be elastic. Also, the wider the range of uses for magazine subscriptions, the more elastic could be the demand for them. If magazine subscriptions take a relatively large amount of consumers' incomes. then demand will have a tendency to be elastic.

## 1. All Magazine Subscriptions

Table 4.1 indicates that the demand curve for all magazine subscriptions is linear and is elastic. The calculated measures of elasticity highlight this observation, i.e., price elasticity tends to increase as we consider higher price ranges. The price elasticity of demand for magazine subscriptions is - 3.1, i.e., for every $1 \%$ increase in the price of magazine subscriptions, there is a $3.1 \%$ decrease in the number of subscriptions people would purchase ${ }^{7}$. The price elasticity of magazine subscriptions likely can be interpreted in large part by the availability of good substitutes, e.g., purchase magazines at the newsstand, other types of reading materials. borrowing from libraries, friends, etc., or doing other activities such as watching television, listening to radio, etc. By price range of magazine subscriptions, the only noticeable differences in price elasticity from the total is for subscriptions in the $\$ 20-\$ 29$ range (2.5) and in those $\$ 40$ or more ( -4.9 ) (Table 4.1).

## 2. Canadian Magazine Subscriptions

Price elasticity for Canadian magazine subscriptions was - 3.7 (Table 4.1), which is higher than that for all subscriptions considered together. The least price sensitive periodical subscriptions were those costing less than $\$ 10$, i.e., for every $1 \%$ increase in the price of Canadian magazine subscriptions in this price category, there would be a decrease of $2.7 \%$ in the number demanded. The most price sensitive subscriptions were in the highest price categories. Again, the price elastic nature of Canadian magazine subscriptions likely is accounted for by the availability of good substitutes.

7 The section on "Bailout Values" (following). which takes a marketing/sociological perspective, essentially confirms the findings of this part of the study.

## PRICE ELASTICITY OF DEMAND BY PRICE RANGE FOR ALL AND CANADIAN MAGAZINE SUBSCRIPTIONS

| Type of Magazine <br> Subscription and Range | Price <br> Elasticity | Base ( $\mathbf{n}=\mathbf{)}$ |
| :---: | :---: | :---: |
| All Magazines | $-3.1 \quad 1$ | $(1,421)$ |
| Less than $\$ 10$ | -2.9 | $(85)$ |
| $\$ 10-\$ 19$ | -3.2 | $(585)$ |
| $\$ 20-\$ 29$ | -2.5 | $(445)$ |
| $\$ 30-\$ 39$ | -2.9 | $(139)$ |
| $\$ 40$ and more | -4.9 | $(167)$ |
|  |  | $(25)$ |
| Canadian Magazines | -3.7 | $(66)$ |
| Less than \$10 | -2.7 | $(453)$ |
| $\$ 10-\$ 19$ | -3.1 | $(243)$ |
| $\$ 20-\$ 29$ | -3.1 | $(76)$ |
| $\$ 30-\$ 39$ | -3.3 | $(87)$ |

Type of Magazine Subscription and Range

All Magazines
Less than $\$ 10$
\$10-\$19
\$20-\$29
\$30-\$39
$\$ 40$ and more
$-3.7$
Less than $\$ 10$
-3.1
\$20-\$29
.
$\$ 40$ and more
-9.3

1 READS: For every $1 \%$ increase in the price of magazine subscriptions there would be a resulting decrease of $3.1 \%$ in the quantity demanded.

## CONCLUSION 4:

The demand for magazine subscriptions is price elastic. Canadian periodical subscriptions were more price elastic than all subscriptions combined, and the least price sensitive ones were those under $\$ 10$. Magazine subscriptions costing $\$ 40$ and more were more price sensitive, than those in other price ranges. Canadian subscriptions in this price category were noticeably the most price sensitive group.

## B. BAILOUT VALUES: THE MARKETING/SOCIOLOGICAL PERSPECTIVE

In the survey of magazine subscribers, respondents were asked to provide information on up to 5 magazines to which their household subscribed and received by mail, i.e., whether or not the magazines were published or edited in Canada, the length of time to which the magazines had been subscribed, annual subscription price, and price willing to pay. Recalling the definition of bailout from the first section of this report, a bailout value was calculated for each of the up to five magazine subscriptions reported by respondents. There were no noticeable differences in the results from one magazine subscription to another, i.e., the median percentage price increases for all magazine subscription after the bailout values were calculated were in the range of $20.2 \%$ to $24.7 \%$. Correlation analysis of the bailout values on the up to 5 magazine subscriptions showed that there was a high degree of collinearity among their bailout values. For purposes of the analysis, this means that it is not necessary to examine price sensitivity for each magazine separately.

1. Bailout of First Magazine Subscription Mentioned

We decided to examine price sensitivity for the first magazine subscription mentioned by individuals as well as for the complete
selection of subscriptions on which respondents were asked to provide information. The following analysis deals with the first periodical mentioned, and the next section analyses the results for all magazine subscriptions mentioned.

## Overall Bailout Results

Respondents were asked if they would repurchase the first magazine subscription they mentioned if the price were to increase by $10 \%$, $20 \%$ and $30 \%$. In addition, they were asked how high the price would have to go before they would not subscribe to the magazine. Tables 4.2 and 4.3 and Chart 4.1 indicate that, for all the magazine subscriptions first mentioned, $10 \%$ of those surveyed would not repurchase or continue their magazine subscription even if the price were to remain unchanged or decrease. If the price of the subscription were to increase by $10 \%$, then $79 \%$ of the respondents would have repurchased it. ${ }^{8}$ Just over half of respondents would have bought the magazine subscription if its price were to increase by $20 \%$. At a price increase of $30 \%$, only $29 \%$ of the sample suggested that they would have bought the magazine subscription. Only $5 \%$ of magazine subscribers would have continued to purchase their periodical subscription, even at a price increase of $100 \%$ of more.

Table 4.3 shows that, overall, the median bailout value for all magazine subscriptions first mentioned was $24 \%$. This implies that if magazine subscription prices were to increase by $24 \%$, half of the sample would have still repurchased their subscriptions and half would not have repurchased. Also shown by Table 4.3 is the average (mean) bailout value of $37 \%$ for all subscriptions first mentioned. The difference between the average and median bailout values

[^7]TABLE 4.2

## RELATIONSHIP OF PROBABILITY OF RE-PURCHASE AND PERCENT PRICE <br> INCREASE OF ALL MAGAZINE SUBSCRIPTIONS FIRST MENTIONED

Probability of Repurchase

| Price Increase | Subscription Nationality |  |  |  | Price Category of Subscription |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All |  | Canadian | Foreign | $\begin{gathered} \begin{array}{c} \text { Less } \\ \text { than } \$ 10 \\ \% \end{array} \end{gathered}$ | \$10-19 | \$20-29 | \$30-39 | \$40+ |
| 0 | 90 |  | 90 | 91 | 94 | 92 | 90 | 92 | 81 |
| 10 | 79 | 1 | 80 | 79 | 84 | 81 | 79 | 81 | 64 |
| 15 | 71 |  | 73 | 70 | 67 | 72 | 72 | 68 | 60 |
| 20 | 52 |  | 52 | 53 | 56 | 53 | 50 | 45 | 52 |
| 25 | 41 |  | 41 | 46 | 44 | 45 | 38 | 43 | 34 |
| 30 | 29 |  | 29 | 33 | 32 | 33 | 28 | 27 | 22 |
| 50 | 20 |  | 20 | 21 | 28 | 22 | 18 | 11 | 13 |
| 75 | 13 |  | 12 | 16 | 27 | 11 | 14 | 2 | 7 |
| 100 | 5 |  | 5 | 8 | 14 | 6 | 3 | - | 5 |

1 READS: If the price of magazine subscriptions increased by $10 \%$, then $79 \%$ of respondents would have repurchased the magazine subscription. Interestinglv, $10 \%$ of those surveyed would not have repurchased the magazine subscription, even at the same price.

RELATIONSHIP OF PROBABILITY OF REPURCHASE
AND \% PRICE INCREASE OF ALL MAGAZINE SUBSCRIPTIONS FIRST MENTIONED


## TABLE 4.3

## MEDIAN AND MEAN BAILOUT VALUES FOR

## FIRST MAGAZINE SUBSCRIPTION MENTIONED



1 READS: The median bailout value for all subscriptions first mentioned is $24 \%$. In other words, if magazine subscription prices increased by $24 \%$, $50 \%$ of the sample would not repurchase (or continue) their magazine subscription and $50 \%$ would repurchase.
indicates that relatively few magazines subscribers reported very high bailout values, i.e., they were less sensitive to increases in the price of magazine subscriptions.

Magazine Subscription Price Sensitivity by Nationality of Periodical, Length of Subscription, Sex of Respondent, and Number of Subscriptions

The data in Tables 4.2 and 4.3 indicate that there is no noticeable difference in bailout values between Canadian and foreign magazine subscriptions. Further statistical tests confirmed that, whatever differences there were, they were not significant. Moreover, when bailout values were examined in relation to the length of time respondents received their magazine subscriptions, the bailout value for periodicals received 2 years or more was higher than those acquired for less than 2 years; however, the difference was not statistically significant. At the $5 \%$ level of significance (t-test), there was a difference in the bailout values between male and female respondents. Males were less sensitive than female, to increases in the price of subscriptions. Finally, there was no noticeable association between bailout values and the number of subscriptions households received.

## CONCLUSION 5:

Excluding individuals apparently not satisfied with their original purchase (those who will not renew regardless of price increase) and those completely satisfied, (those who will renew regardless of price increase) magazine subscription purchase, are sensitive to price increases. For all periodical subscriptions, even a $10 \%$ increase in their prices would result in about one-fifth of respondents deciding not to repurchase. For the sample of people surveyed, the dividing line appears to be at the $24 \%$ increase level. If magazine subscription prices were to increase by this amount, the
survey suggests that $50 \%$ of individuals would not repurchase their periodicals and the remaining half would repurchase. When the nationalities and the length of time of the magazine subscriptions are considered, it is found that price sensitivities are consistent across Canadian and foreign periodicals, and across the length of time people had been receiving their magazines. Female respondents were significantly more price sensitive than males in the sample. The number of magazine subscriptions received by households had no relationship to bailout values.

## Multivariate Analysis of Bailout Values by Annual Expenditures on Magazine Subscriptions

Analysis of variance of bailout values by annual expenditures on magazine subscriptions revealed a significant degree of relationship between the two variables (F-ratio, significant at the $1 \%$ level). Multiple regression analysis of annüal expenditures on magazine subscriptions, length of subscription, and nationality of subscription on bailout values shows that annual expenditures on periodical subscriptions is significantly associated with the bailout values (at the $1 \%$ level).

## CONCLUSION 6:

Multivariate analysis shows that, for magazine subscriptions first mentioned, sensitivity with respect to increases in the price of magazine subscriptions was significantly related to the annual household expenditures on periodical subscriptions.

## Factors Associated with Bailout Values

Analysis of Variance, which examined the relationship between bailout value and selected socio-demographic characteristics, i.e.,


#### Abstract

number of adults and children in the household, language spoken most often at home, age of respondent, education. employment status. gross household income, and municipality size, revealed that bailout value was significantly related to the number of adults in the household (Table 4.4). Analysis of differences within specific sociodemographic characteristics is shown in Table 4.5. It can be seen that households with five adults were the least price sensitive, i.e.. average bailout value was $94 \%$. Francophone respondents, with an average bailout value of $45 \%$, were less sensitive than other language groups. People with a university degree were the most price sensitive, as were households where gross income was $\$ 30,001$. $\$ 40.000$. In households with gross income exceeding $\$ 80.000$. people were the least sensitive to increases in price, i.e., average bailout value was $61 \%$.


## CONCLUSION 7:

According to the preceding analysis, the most significant socio-demographic characteristic related to price sensitivity of magazine subscriptions was the number of adults in the household. The groups most sensitive to increases in the price of subscriptions were households with six adults, respondents who spoke neither English nor French most often at home, people with a university degree, and households reporting gross income in the range of $\$ 30,001-\$ 40.000$.

## ANALYSIS OF VARIANCE BETWEEN BAILOUT VALUE AND SELECTED

SOCIO-DEMOGRAPHIC CHARACTERISTICS, FIRST MAGAZINE SUBSCRIPTION MENTIONED


## TABLE 4.5

## AVERAGE BAILOUT VALUE BY SELECTED SOCIO-DEMOGRAPHIC

## CHARACTERISTIC, FIRST MAGAZINE SUBSCRIPTION MENTIONED

$\left.\begin{array}{cccr}\begin{array}{c}\text { Socio-Demographic } \\ \text { Characteristic }\end{array} & \begin{array}{c}\text { Average } \\ \text { Bailout Value }\end{array} & & \text { Base ( } \mathbf{n}=\mathbf{)}\end{array}\right)$

* Using Duncan's multiple test of significant differences. those between the highest average and those with asterisks are significant at the $5 \%$ level. See notes, Table 3.3.

1 READS: Respondents reporting five adults in the household would accept a price increase up to $94 \%$, but would not repurchase their magazine subscriptions if prices increased by $94 \%$ or more.

The
2. Bailout of All Magazine Subscriptions

This part of the report discusses the results for the combination of all magazine subscriptions reported by respondents as opposed to the first periodical mentioned in the preceding section.

## Overall Bailout Results

Tables 4.6 and 4.7, and Chart 4.2 show that $13 \%$ of respondents would not repurchase their magazine subscriptions even if prices were to remain the same or decrease. About $75 \%$ of respondents would have repurchased their subscriptions in the face of a $10 \%$ price increase. For price increases exceeding $20 \%$, the distribution of the probabilities of repurchase is similar to that for the periodical subscription first mentioned (compare Tables 4.6 and 4.2).

Overall, the data in Table 4.7 show that the median bailout value for all magazine subscriptions reported was $20 \%$, indicating that with this amount of a price increase, half the sample would not repurchase their subscription and the other half would. The difference between the median and average bailout values, $20 \%$ as opposed to $39 \%$. suggests that relatively few magazine subscribers reported very high bailout values, that is. they were less sensitive to price increases of magazine subscriptions.

## Magazine Subscription Price Sensitivity by Nationality of Periodical, Length of Subscription, Sex of Respondent and Length of Subscription

At first glance, it would appear from the results in Tables 4.6 and 4.7 that there is not noticeable difference in bailout values between Canadian and foreign magazine subscriptions. Statistical tests indicated that there were not statistically significant differences. When bailout values were examined with respect to the length of

## TABLE 4.6

## RELATIONSHIP OF PROBABILITY OF RE-PURCHASE AND PERCENT PRICE <br> INCREASE OF ALL MAGAZINE SUBSCRIPTIONS MENTIONED

Probability of Repurchase

| Price Increase | Subscription Nationality |  |  | Price Category of Subscription |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All | Canadian | Foreign | $\begin{gathered} \begin{array}{c} \text { Less } \\ \text { than } \$ 10 \end{array} \\ \hline \end{gathered}$ | \$10-19 | \$20-29 | \$30-39 | \$40+ |
| 0 | 87 | 87 | 89 | 92 | 88 | 87 | 87 | 81 |
| 10 | 75 | 174 | 80 | 83 | 76 | 77 | 72 | 62 |
| 15 | 70 | 69 | 74 | 70 | 70 | 70 | 65 | 58 |
| 20 | 49 | 48 | 53 | 61 | 50 | 48 | 43 | 45 |
| 25 | 41 | 40 | 46 | 54 | 43 | 38 | 41 | 35 |
| 30 | 30 | 29 | 34 | 36 | 34 | 28 | 23 | 25 |
| 50 | 19 | 18 | 22 | 32 | 22 | 16 | 9 | 15 |
| 75 | 13 | 12 | 15 | 30 | 14 | 10 | 3 | 9 |
| 100 | 6 | 6 | 9 | 19 | 7 | 4 | 2 | 3 |

1 READS: If the price of magazine subscriptions increased by $10 \%$, then $75 \%$ of respondents would have repurchased the magazine subscription.

## TABLE 4.7

MEDIAN AND MEAN BAILOUT VALUES FOR

## ALL MAGAZINE SUBSCRIPTIONS MENTIONED



1 READS: The median bailout value for all subscriptions mentioned is $20 \%$. That is, if magazine subscription prices increased by $20 \%, 50 \%$ of the sample would not repurchase (or continue) their magazine subscriptions and $50 \%$ would repurchase.

CHART 4.2
RELATIONSHIP OF PROBABILITY OF REPURCHASE
AND \% PRICE INCREASE OF ALL MAGAZINE SUBSCRIPTIONS



#### Abstract

time subscriptions had been received. the bailout value for magazines obtained 2 years or more was higher than that for magazines received less than 2 years ( $t$-test. statistically significant at the $1 \%$ level). In other words, people who had been receiving their magazines for 2 years or more were less price sensitive than those who had been subscribing for less than 2 years. At the $1 \%$ level of significance ( $t$ test), the survey results showed that males were less sensitive than females to price increases of subscriptions, or that bailout values for males were higher than those for females. When bailout values were examined in relation to number of subscriptions received by the household, no statistically significant association was evident.


## CONCLUSION 8:

Magazine subscriptions are price sensitive. A $10 \%$ increase in the price of all magazine subscriptions would bring about a situation where some $25 \%$ of respondents would not repurchase. For the sample of individuals surveyed, the dividing line seems to be at the $20 \%$ level of increase. At a $20 \%$ price increase. half of the people would not continue to purchase their subscriptions and the other half would repurchase. Price sensitivities are consistent across Canadian and foreign magazines. Respondents who received their periodicals for less than 2 years were noticeably more price sensitive than those longer-time subscribers. As well, females were significantly more price sensitive than males. The number of magazine subscriptions households received had no bearing on price sensitivities.

## Multivariate Analysis of Bailout Values by Annual Expenditures on Magazine Subscriptions

Statistical analysis (analysis of variance) of the relationship between bailout values and annual expenditures on magazine subscriptions
indicated that there was a significant degree of association (F-ratio. significant at the $1 \%$ level). At the $5 \%$ level of significance, an observable relationship was found between the bailout values and the titles of selected magazine subscriptions received. (See list, Table 2.1) The latter finding should not be too surprising, for individuals are expressing "revealed preferences" among their magazine subscriptions. i.e., some magazine titles are more price sensitive than others. For instance, the average bailout values for some of the more frequently-reported magazines were: Chatelaine (25\%). MacLean's (30\%), Reader's Digest (42\%), and Time (25\%). Of this group, the least price sensitive was Reader's Digest.

Multiple regression analysis of annual expenditures on magazine subscriptions. length of subscription, and nationality of periodical on bailout values indicates that annual expenditures on periodical subscriptions (at the $1 \%$ level) and the length of the subscription (at the $5 \%$ level) are significantly related to bailout values.

## CONCLUSION 9:

For all magazine subscriptions mentioned by respondents, multivariate analysis shows that sensitivity with respect to increases in the price of magazine subscriptions was significantly associated with annual household expenditures on subscriptions, and the length of time which people subscribed to magazines.

## Factors Associated with Bailout Values

When the relationship between bailout value and selected sociodemographic characteristics was examined, analysis of variance indicated a significant association (at the $1 \%$ level) for number of

## TABLE 4.8

## ANALYSIS OF VARIANCE BETWEEN BAILOUT VALUE AND SELECTED

 SOCIO-DEMOGRAPHIC CHARACTERISTICS, ALL MAGAZINE SUBSCRIPTIONS MENTIONED| Socio-Demographic <br> Characteristic | F-Ratio | Base ( $\mathrm{n}=$ ) |
| :--- | :---: | :---: | :---: |
| Number of Adults | $3.919 * *$ | $(1,233)$ |
| Number of Children | $5.851 * *$ | $(557)$ |
| Language | $12.298 * *$ | $(1,241)$ |
| Age | $4.287 * *$ | $(1,234)$ |
| Education | $3.377 * *$ | $(1,235)$ |
| Employment Status | $2.423 *$ | $(1,238)$ |
| Household Income | $2.689 * *$ | $(1,063)$ |
| Municipality Size | 0.506 | $(1,221)$ |

## ** Significant at 1\% level

* Significant at $5 \%$ level

AVERAGE BAILOUT VALUE BY SELECTED SOCIO-DEMOGRAPHIC
CHARACTERISTIC, ALL MAGAZINE SUBSCRIPTIONS MENTIONED

| Socio-Demographic <br> Characteristic | Average <br> Bailout Value |  |
| :---: | :---: | :---: | :---: |
|  |  | Base (n ) |

* Using Duncan's multiple test of significant differences, those between the highest and those with asterisks are significant at the $5 \%$ level. See note. Table 3.3.

1 READS: Respondents reporting five adults in the household would accept a price increase up to $87 \%$, but would not repurchase their magazine The subscriptions if prices increased by $87 \%$ or more.
adults and children in the household, language spoken most often at home, age of the respondent, education, household income, and (at the $5 \%$ level) for employment status (Table 4.8). Table 4.9 shows that analysis of differences within specific socio-demographic characteristics. Households with five adults (bailout value of $87 \%$ ) were the least price sensitive, as were those with five children ( $108 \%$ ), those where neither English nor French were spoken most often ( $98 \%$ ), respondents 65 years of age and older ( $65 \%$ ), people with post-graduate degrees $(68 \%)$, retired respondents ( $54 \%$ ), and households reporting gross income of $\$ 60.001-\$ 70,000(52 \%)$.

## CONCLUSION 10:

The most significant socio-demographic characteristics associated with price sensitivity of all magazine subscriptions were language spoken most often at home, the number of children in the household, age of the respondent. the number of adults in the household, education. household income, and employment status. Groups who were most sensitive to price increases were households with six adults, one child, where English was spoken most frequently, people aged 45-64, individuals with primary school education or less, homemakers, and households reporting gross income of $\$ 30,001-\$ 40,000$.

## C. MAGAZINE SUBSCRIPTION VULNERABILITY

1. Magazine Subscriptions Dropped by Nationality of Periodical and Length of Subscription

As both the price elasticity and bailout value analyses indicate, magazine subscriptions are sensitive to price increases. While the elasticity analysis suggested that there are differences in price

TABLE 4.10

DISTRIBUTION OF MAGAZINE SUBSCRIPTIONS AND OF MAGAZINE SUBSCRIPTIONS DROPPED, BY NATIONALITY OF PERIODICAL AND LENGTH OF SUBSCRIPTION


Nationality of
Periodical
(1.669)
$(1,246)$
(953)
(710)

| Canadian | 73 | 77 | 74 | 75 |
| :--- | :---: | :---: | :---: | :---: |
| Foreign | 27 | 23 | 26 | 25 |
| (t-test) |  | $(-2.51) *$ | $(-0.92)$ | $(-2.38) *$ |

Length of
Subscription
$(1,842)$
$(1,451)$
$(1,116)$
(835)

| Less than |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| 2 years | 28 | 36 | 29 | 32 |
| 2 years or more | 72 | 64 | 71 | 68 |
| $(t-t e s t)$ |  | $(-6.85) * *$ | $(-1.31)$ | $(-1.93) *$ |

** Significant at $1 \%$ level.

* Significant at $5 \%$ level.
sensitivities of magazine subscriptions by nationality of periodical, the various statistical tests done in the bailout value analysis showed that these differences are not significant. In Table 4.10, the distribution of magazine subscription dropped is compared with the distribution of all magazine subscriptions mentioned, by nationality of periodical and by length of subscription. With respect to the differences in the two distributions, that based on length of subscription after the first magazine dropped was statistically significant at the $1 \%$ level, and that based on nationality of periodical after the first magazine dropped was significant at the $5 \%$ level.


## CONCLUSION 11:

Canadian periodicals and those whose length of subscription was less than 2 years would be the first dropped as a result of a significant price increase.

## 2. Magazine Subscriptions Dropped by Socio-Demographic Factors

The relationship between magazine subscriptions dropped and socio demographic characteristics is shown in Table 4.11. While it is clear that Canadian periodicals would be dropped first as a result of price increases, there are some households in which the likelihood of dropping a Canadian magazine first is greater than in others. If prices climbed to the point where one subscription had to be dropped, the characteristics of households which would be most likely to drop a Canadian periodical first are related to language spoken most frequently at home, age of the respondent, education, employment status, and household income.

## TABLE 4.11

# RELATIONSHIP OF SOCIO-DEMOGRAPHIC FACTORS AND DISTRIBUTION OF MAGAZINE SUBSCRIPTION DROPPED BY NATIONALITY OF MAGAZINE 

| Socio-Demographic <br> Factor |
| :---: |

$\frac{\text { Number of Adults }}{1}$
2
3
4 or more
(Chi-square)
Number of Children
1
2
3
4 or more
(Chi-square)

Language
English
French
Other
(Chi-square)
Age
$18-24$
$25-34$
$35-44$
$45-54$
$55-64$
65 and over
(Chi-square)

Education
Primary school
or less
Some high school
High school
graduate
some college
College graduate
Some university
University graduate
Some post-graduate
Post-graduate
degree
(Chi-square)

| $(25) 80$ | 20 |
| :---: | :---: |
| $(165) 79$ | 21 |
|  |  |
| $(655) 78$ | 22 |
| $(110) 77$ | 23 |
| $(205) 83$ | 17 |
| $(155)$ | 71 |
| $(490)$ | 75 |
| $(30)$ | 29 |
| $(120)$ | 17 |
| $(17.03) *$ | 33 |


| (20) | 100 | - | (15) | 100 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (80) |  | 19 | * 80) |  | 37 |
| (415) | 81 | 19 | (250) |  | 24 |
| (60) | 75 | 25 | (35) |  | 14 |
| (135) | 74 | 26 | (80) | 88 | 12 |
| (95) | 63 | 37 | (75) |  | 27 |
| (340) | 68 | 32 | (240) |  | 31 |
| (15) | 100 | - | (15) | 67 | 33 |
| (85) | 65 | 35 | (55) | 91 | 9 |
|  | 1.27 |  |  | 3.82 |  |

## Magazine Subscription Dropped

|  | 1 st |  |  | 2nd |  |  | 3rd |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Socio-Demographic Factor | $\begin{aligned} & \text { Base } \\ & (\mathrm{n}=) \end{aligned}$ | Cdn. | Foreign | $\begin{aligned} & \text { Base } \\ & (\mathrm{n}=) \end{aligned}$ | Cdn. | Foreign | $\begin{aligned} & \text { Base } \\ & \text { ( } \mathbf{n}=\text { ) } \end{aligned}$ | Cdn. | Foreign |

Employment Status
Employed
Unemployed
Homemaker
Student
Retired
(Chi-square)

| (1.270) |  | 27 |
| :---: | :---: | :---: |
| (55) |  | 36 |
| (270) |  | 17 |
| (100) |  | 25 |
| (270) | 89 | 11 |
|  | 42.9 |  |


| $(805) 78$ | 22 | $(535) 74$ | 26 |
| :---: | :---: | :---: | :---: |
| $(40) 75$ | 25 | $(35) 100$ | - |
| $(175) 57$ | 43 | $(120) 71$ | 29 |
| $(60) 50$ | 50 | $(45) 56$ | 44 |
| $(165) 85$ | 15 | $(110) 86$ | 14 |
| $(59.85) * *$ |  | $(29.93) * *$ |  |

Household Income
$\$ 10,000$ or less
$\$ 10.001-\$ 20,000$
$\$ 20,001-\$ 30,000$
$\$ 30.001-\$ 40.000$
$\$ 40.001-\$ 50,000$
$\$ 50,001-\$ 60,000$
$\$ 60.001-\$ 0,000$
$\$ 70,001-\$ 80,000$
More than $\$ 80,000$
(Chi-square)

| $(50)$ | 100 | - |
| :---: | :--- | :---: |
| $(195)$ | 74 | 26 |
| $(310)$ | 79 | 21 |
| $(280)$ | 71 | 29 |
| $(285)$ | 83 | 17 |
| $(275)$ | 82 | 18 |
| $(85)$ | 71 | 29 |
| $(75)$ | 67 | 33 |
| $(105)$ | 71 | 29 |
| $(38.39) * *$ |  |  |


| (25) | 100 |  | (20) | 100 | - |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (105) | 86 | 14 | (60) |  | 25 |
| (155) | 77 | 23 | (95) |  | 16 |
| (220) | 82 | 18 | (135) |  | 22 |
| (160) | 69 | 31 | (120) |  | 29 |
| (175) | 69 | 31 | (130) |  | 23 |
|  | 70 | 30 | (55) |  | 27 |
| (60) | 83 | 17 | (55) |  | 27 |
| (60) | 50 | 50 | (40) |  | 25 |
| (51.09)** |  |  | (12.63) |  |  |

** Significant at $1 \%$ level

* Significant at 5\% level


## Language Spoken at Home

In households where languages other than English or French are spoken most frequently, almost $90 \%$ indicated that a Canadian magazine subscription would be the first dropped (Table 4.11).

## Age

Respondents in the age group 55-64 would have been the most likely to drop a Canadian periodical subscription first in the event of a significant price increase ( $80 \%$ ).

## Education

Canadian magazine subscriptions would be dropped first most likely in households where people had completed college or some postgraduate education ( $83 \%$ in both cases).

## Employment Status

Homemakers and students who purchased magazine subscriptions, bought them in the ratios of $70 \%$ Canada - 30\% Foreign, and 63\% Canada - 37\% Foreign, respectively. Of the subscriptions first dropped, $83 \%$ of homemakers and $75 \%$ of students indicated that Canadian periodicals would be the first dropped.

## Household Income

Households with gross income of $\$ 10.000$ or less would give up Canadian magazine subscriptions first if prices were to increase followed by households with incomes in the range of \$40.001 \$50,000.

## CONCLUSION 12:

Canadian magazine subscriptions would be the first to be dropped by households in which languages other than French or English were spoken most often. where respondents were in the age group 55-64, where respondents had completed college or had some post-graduate education, where respondents were retired, and by households with the lowest gross incomes.

## 3. Magazine Subscriptions Dropped and Price Sensitivity

If subscription prices increased such that one or more magazines had to be given up, the distribution of the times at which magazine subscriptions would be dropped as a result of price increases is shown in Table 4.12. About $31 \%$ of subscriptions would have been the first dropped, another $19 \%$ would have been the second dropped, and a further $13 \%$ would have been the third dropped. Some $37 \%$ of periodical subscriptions would not have been dropped at all. Analysis of variance indicated that there was a statistically significant relationship between the bailout value and the time the magazine subscription would be dropped (F-ratio $=6.951$, significant at the $1 \%$ level). Further statistical analysis revealed that respondents who would not drop a magazine as a result of price increases (not surprisingly) had the highest average bailout value, i.e.. 50\% (Table 4.13).

## CONCLUSION 13:

Not surprisingly, if prices increased to the point where some magazine subscriptions had to be dropped, respondents who were the least sensitive to increases in the price of subscriptions were likely to hold onto magazine subscriptions longer than others.

## Multivariate Analysis of Bailout Value by Time at Which Magazine Subscription Would be Dropped

With analysis of covariance (ANOCOVA), there was an attempt to ascertain whether or not significant price sensitivity differences exist across times when magazine subscriptions would be dropped, after controlling for any possible effects arising from the annual expenditures for subscriptions and the number of subscriptions received. Results of the analysis indicate that there were significant "main effects". after controlling for the two previouslv-mentioned variables. Hence, even when the influences of annual subscription expenditures and the number of subscriptions were eliminated, price sensitivities continued to differ significantly by time at which the magazine subscription would be dropped.

## Time at Which Magazine Subscription Dropped by Nationality of Magazine

The distribution of magazine subscriptions dropped by nationality of periodical was significantly different from the distribution of magazine subscriptions purchased by nationality (Chi-square. significant at the $1 \%$ level) (Table 4.14.).

DISTRIBUTION OF THE TIME AT WHICH MAGAZINE SUBSCRIPTIONS WOULD BE DROPPED DUE TO PRICE INCREASES

Time Magazine Subscription Dropped

## Distribution

 \%1st $31 \quad 1$

2nd
19

3rd
13

Not
37

Base ( $\mathrm{n}=$ )
(460)
(282)
(185)
(539)

1 READS: If prices increased to the point where one magazine subscription had to be dropped, about 31\% of subscriptions would be the first dropped.

## TABLE 4.13

## AVERAGE BAILOUT VALUE BY TIMES AT WHICH MAGAZINE <br> SUBSCRIPTIONS WOULD BE DROPPED

Time Magazine
Subscription Dropped

1st

2nd

3rd

Not

501
Base ( $\mathrm{n}=$ ) Bailout Value \%

27 * $=$

35 *

44
(380)

* Using Duncan's multiple test of significant differences, those between not dropping a magazine subscription and the first and second magazines dropped are significant at the $5 \%$ level. See note, Table 3.3.

1 READS: People who did not drop a magazine subscription as a result of price increases had the highest average bailout value. i.e., were least sensitive to increases in the price of magazine subscriptions.

## CONCLUSION 14:

When prices increased to the extent where magazine subscriptions would be dropped, the nationality of the periodical was significantly related to when the magazine would be dropped.

## Relationship of Time Canadian Magazine Subscriptions Would be Dropped and Bailout Values

There was a significant relationship between respondents' price sensitivities and the time they would drop a Canadian magazine subscription (F-ratio. significant at the $1 \%$ ). People who were the most price sensitive would have dropped a Canadian periodical first. i.e., average bailout value was $27 \%$ (Table 4.15). People who would not drop their Canadian periodical subscriptions were significantly less sensitive to price increases (bailout value was 51\%).

Relationship of Time Foreign Magazine Subscriptions Would be Dropped and Bailout Values

Analysis of variance between bailout value (or price sensitivities) and the time a foreign periodical subscription would be dropped revealed that there was a significant relationship between the two variables (F-ratio. significant at the $1 \%$ level). As can be seen in Table 4.16, there was a significant difference (at the $5 \%$ level) between foreign magazine subscriptions not dropped and those dropped either first. second or third. As expected, those subscriptions with the lowest bailout value i.e., greatest price sensitivity, would be the first to be dropped.

## The

TABLE 4.14

## RELATIONSHIP OF TIMES AT WHICH MAGAZINE SUBSCRIPTIONS

 DROPPED TO NATIONALITY OF MAGAZINE ${ }^{1}$Time Magazine Subscription Dropped

1st

2nd

3rd

Not

34
13
11

45
Base ( $\mathrm{n}=$ )
\%

34
26

18
(410)
(247)
(166)
(484)

Chi-square $=16.33 * *$
** Significant at $1 \%$ leve!

* Significant at 5\% level

1READS: The distribution of magazine subscriptions purchased, by nationality of author, is compared to the distribution of the time the magazines were dropped, and a statistically significant difference was found.

## TABLE 4.15

## AVERAGE BAILOUT VALUE BY TIMES AT WHICH CANADIAN MAGAZINE

## SUBSCRIPTIONS WOULD BE DROPPED

|  | Time Magazine Subscription Dropped | $\begin{gathered} \begin{array}{c} \text { Average } \\ \text { Bailout Value } \end{array} \\ \% \end{gathered}$ |  | Base ( $\mathrm{n}=$ |
| :---: | :---: | :---: | :---: | :---: |
|  | 1st | 27 | * | (225) |
|  | 2nd | 36 |  | (118) |
|  | 3rd | 53 |  | (77) |
|  | Not | 51 | 1 | (214) |
| * | Using Duncan's multiple test of significant differences, those between dropping 3rd and not dropping and the first to be dropped is significant at the $5 \%$ level. See note, Table 3.3. |  |  |  |
| 1 | READS: | ing a Cana e increas gazine sub |  | subscrip st sens |

dropping 3 rd and not dropping and the first to be dropped is significant at the $5 \%$ level. See note, Table 3.3.

1 READS: Those respondents not dropping a Canadian magazine subscription as a result of significant price increases, were the least sensitive to increases in the price of magazine subscriptions.

Coopers
\&Lybrand
Consulting Group

Comparing Tables 4.15 and 4.16 shows that the average bailout values of Canadian and foreign magazines first dropped and those not dropped at all were almost identical. however, for people who would have dropped periodicals second and third as a result of price increases. Canadian magazines were less price sensitive than foreign magazines.

## CONCLUSION 15:

Regardless of the nationality of the magazine subscription. those which were most sensitive to price increases would have been the first to be dropped. If prices continued to increase to the point where two or three magazines would have to be given up then respondents would have held onto Canadian periodicals longer than foreign ones. As the price elasticity analysis suggested, the most price sensitive magazine subscriptions were those costing $\$ 40$ and more.

## AVERAGE BAILOUT VALUE BY TIME FOREIGN MAGAZINE <br> SUBSCRIPTION WOULD BE DROPPED

| Time Magazine Subscription Dropped | $\frac{\begin{array}{c} \text { Average } \\ \text { Bailout Value } \end{array}}{\%}$ |  | Base ( $\mathrm{n}=$ ) |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| 1st | 26 | * | (78) |
| 2nd | 29 | * | (48) |
| 3rd | 32 | * | (29) |
| Not | 52 | 1 | (135) |

* Using Duncan's multiple test of significant differences that between not dropping and the first, second and third to be dropped is significant at the $5 \%$ level. See note, Table 3.3.

1 READS: Those respondents not dropping a foreign magazine subscription as a result of significant price increases, were the least sensitive to increases in the price of magazine subscriptions.

COMMUNITIES IN TELEPHONE SURVEY OF MAGAZINE SUBSCRIBERS

# COMMUNITIES IN TELEPHONE SURVEY 

 OF MAGAZINE SUBSCRIBERSGander<br>Halifax<br>Quebec<br>Montreal<br>Sherbrooke<br>Ottawa<br>Toronto<br>Thunder Bay<br>Brandon<br>Red Deer<br>Calgary<br>Kelowna<br>Vancouver

TOTAL CALLS ATTEMPTED ..... 4,614
CALL BACKS ..... 1,055
NOT IN SERVICE ..... 600
BUSINESS NUMBER ..... 182
LANGUAGE PROBLEM ..... 91
DUPLICATE NUMBER ..... 19
RESPONDENT REFUSAL ..... 773
DOES NOT QUALIFY ..... 1,135
TERMINATION ..... 20
COMPLETED INTERVIEWS ..... 739

## APPENDIX III

## QUESTIONNAIRE

The Coopers \& Lybrand Consulting Group
99 Bank Street, Suite 727
Ottawa, Ontario
K1P 6B9

FOR OFF
Card No.:
Resp. No.:
Project No.: 4t

## MAGAZINE SUBSCRIBER TELEPHONE SURVEY

## INTRODUCTION

Good morning/afternoon/evening. My name is
from The Coopers \& Lybrand Consulting Group. We're conducting a national survey for a federal government department to find out about people's magazine subscription habits.

## SECTION A: SCREENING

1. a) At the present time, do you or does anyone in your household subscribe to and receive by mail magazines like Maclean's, Time, Chatelaine, Popular Mechanics, or some other type of periodical like a business, scientific or religious periodical? This excludes magazines sent/distributed free of charge, those paid by someone else. such as your employer, as well as those received as part of membership in an association.

| Yes | 1 |
| :--- | :--- |
| No | $2 \rightarrow$ THANK AND TERMINATE |

b) May I speak to the individual in your household who has the greatest number of these magazine subscriptions? This person should be at least 18 years of age. RE-INTRODUCE YOURSELF, IF NECESSARY. I assure you that the information you give is confidential and will be used for statistical purposes only.

Speaking to person $\quad 1 \rightarrow$ SKIP TO Q. 2
Not at home
2
Refused $\quad 9 \rightarrow$ THANK AND TERMINATE
c) Then may I speak to the individual who can provide me with information on your household's magazine subscriptions? RE-INTRODUCE YOURSELF, IF NECESSARY. I assure you that the information you give is confidential and will be used for statistical purposes only.

```
Yes 1
    No 2}->\mathrm{ THANK AND TERMINATE
```

2. a) Can you tell me the total number of such subscriptions your household receives?

> Number
> Can't recall
b) About how much does your household spend in total in a year for these subscriptions?

$$
\begin{gathered}
\$ \\
\text { Don't know } \\
888
\end{gathered}
$$

## SECTION B: INFORMATION RELATED TO MAGAZINES

3. I would like to ask a few more questions about the magazines to which your household subscribes. I know it may be difficult but can you tell me the names of up to 5 magazines to which your household subscribes and receives by mail, and whether or not they are published or edited in Canada. PROBE RECORD BELOW, BESIDE QUESTION 3.

INTERVIEWER: IF NAME OF MAGAZINE IS NOT KNOWN, ASK FOR TYPE OF CONTENT (consumer, business, scholarly/educational. artistic/literary, religious).
4. For about how long has your household been subscribing to ... READ EACH NAME, ONE AT A TIME, FROM Q. 3 AND RECORD BELOW, BESIDE QUESTION 4.
5. About how much was the annual subscription price you paid for ... READ EACH NAME, ONE AT A TIME, FROM Q. 3 AND RECORD BELOW, BESIDE QUESTION 5.
6. a) If the subscription price of (READ FIRST TITLE) had been $10 \%$ higher, that is (READ NEW PRICE FROM APPROPRIATE ROW IN REFERENCE TABLE) instead of (READ PRICE FROM Q.5), would you still have bought it? RECORD BELOW, BESIDE QUESTION Ga). IF NO, GO TO NEXT MAGAZINE.
b) ... and if the subscription price had been $20 \%$ higher, that is $\$ \ldots$ ? RECORD BELOW, BESIDE QUESTION 6b). IF NO, GO TO next magazine.
c) ... if the subscription price had been $30 \%$ higher, that is $\$ \ldots$ ? RECORD BELOT. BESIDE QUESTION 6c).

REPEAT FOR ALL NAMES LISTED IN Q.3.
7. How high would the price have to rise before you would not buy (READ FIRST TITLE) that now costs $\$$ (READ PRICE FROM Q.S). RECORD AMOUNT BESIDE QUESTION 7 BELOW. REPEAT FOR ALL TITLES.
8. IF ONLY ONE MAGAZINE PURCHASED, SKIP TO Q.9.
a) Suppose that subscription prices increased to the point where you now had to give up one magazine. which one would you drop? RECORD BESIDE QUESTION 8a) BELOT.

IF ONLY TTIO MAGAZINES PURCHASED, SKIP TO Q.9.
b) What if you had to give up a second magazine? Which one would that be? RECORD BESIDE QUESTION 8b) BELOT.

IF ONLY THREE MAGAZINES PURCHASED, SKIP TO Q.9.
c) And, if you had to give up a third one? Which one would you give up next? RECORD BESIDE QUESTION \&c) BELOF.

## QUESTION 3:




QUESTION 8:
a). Ist magazine not purchased
b) 2nd magazine not purchased
c) 3rd magazine not purchased !
3
3
3

Less than 2 years
2 years or more
Don't know

QUESTION S:

$\$$
$\$$
$s$ $\qquad$ $\$$ $\qquad$

QUESTION 6:
a) $10 \%$
Yes
No

Don't know
1
2
8
1

## 2

8
20\%
Yes
No

Don't know
1
2
8
1
2
8

8
) $30 \%$
Yes
No
Don't know

QUESTION 7:
$\$$
$\$$
$\$$ $\qquad$ $\$$
b)

20\%

踥
1
2
8

$\$$ $\qquad$
1


1
2

8
10. How many males and females under the age of 18? READ LIST.
Males
Females
11. Which language do you most often speak at home? DO NOT READ.

|  | English | 1 |
| :--- | ---: | :--- |
| French | 2 |  |
| Other (specify) |  |  |

12. In which of the following age categories do you belong? READ LIST.

| 18 to 24 | 1 |
| ---: | ---: | ---: |
| $25-34$ | 2 |
| $35-44$ | 3 |
| $45-54$ | 4 |
| $55-64$ | 5 |
| DO NOT READ $\longrightarrow$ and over | 6 |
| Refused 9 |  |

13. What was the last grade of formal schooling that you completed? DO NOT READ.

Primary school or less 1
Some high school 2
High school graduate 3
Some community or technical college (CEGEP) 4
Community or technical college (CEGEP) completed 5

Some university 6
University degree at bachelor or equivalent level 7
Some post-graduate studies 8
Post-graduate degree at master or doctorate level or equivalent 9

Refused 99
14. What best describes your current employment status? READ LIST.

|  |  | Employed |
| :---: | :---: | :---: |
|  |  | Unemployed |
|  |  | Homemaker |
|  |  | Student |
|  |  | Retired |
|  | Other (specify) |  |
| DO NOT READ |  | $\rightarrow$ Refused |

15. Is your total annual household income before taxes below or above $\$ 40,000$ ? DO NOT READ.

16. In which of the following categories does it belong?

| IF "BELOW", |
| :--- |
| READ THIS LIST |
| IF "ABOVE", |
| READ THIS LIST $\longrightarrow$$\$ 10,000$ or less 1 <br> $\$ 10,001-\$ 20,000$ 2 <br> $\$ 20,001-\$ 30,000$ 3 <br> $\$ 30,001-\$ 40,000$ 4 |
| $\$ 40,001-\$ 50,000$ |
| 5 |
| $\$ 50,001-\$ 60,000$ |
| 6 |
| $\$ 60,001-\$ 70,000$ |
| $\$ 70,001-\$ 80,000$ |


17. In what kind of municipality do you live presently? Is it ... READ LIST.

$$
\begin{array}{rr}
\text { A large urban centre } & 1 \\
\text { (500,000 + inhabitants) }
\end{array}
$$

(Between 50,001 and 499,999 inhabitants)
An average size city (between 25,000 and 50,000 inhabitants) 3
A smaller city (between 5,000
and 25,000 inhabitants) 4
A rural area (less than 5,000
inhabitants) 5
DO NOT READ $\longrightarrow$ Don't know 8
18. DO NOT ASK BUT RECORD THE FOLLOWING INFORMATION

Sex: | Male | 1 |
| ---: | ---: |
|  | Female |

Date of Interview: $\qquad$

City: $\qquad$

Le Groupe conseil Coopers \& Lybrand
RÉSERVÉ AU BUREAU
99 rue Bank. Suite 727
No. de fiche: $\quad 1$

Ottawa, Ontario
No. de resp.: — ....
K1P 6B9
No. de projet: 401576

## ENQUETE TÉLÉPHONIQUE AUPRĖS DES ABONNÉS DE PERIODIQUES

## INTRODUCTION

Bonjour/bonsoir. Je m'appelle du Groupe conseil Coopers \& Lybrand. Nous effectuons, pour le compte d'un ministère fédéral, une enquête nationale en vue de déterminer les habitudes des gens quant à l'achat de périodiques.

## SECTION A: TRI

1. a) A l'heure actuelle, êtes-vous ou une autre personne de votre foyer abonné à des périodiques comme le MacLean's, Chatelaine, Popular Mechanics, ou à tout autre périodique du genre dans le domaine des sciences, des affaires ou de la religion? Ceci exclut naturellement les périodiques envoyés ou distribués gratuitement, ceux dont les frais d'abonnement sont payés par quelqu'un d'autre que vous, par exemple votre employeur, de même que ceux reçus sans frais additionels en tant que menbre d'une association.

| Oui | 1 |
| :--- | :--- |
| Non | $2 \rightarrow$ REMERCIER ET TERMINER |

b) Est-ce que je peux parler à la personne dans votre foyer qui reçoit le plus grand nombre d'abonnements? Cette personne devrait avoir au moins 18 ans. SE RE-PRÉSENTER, AU BESOIN. Laissez-moi vous assurer que l'information que vous fournirez est confidentielle et ne sera utilisée que pour des fins statistiques.

| Parle à la personne | $1 \rightarrow$ PASSER A Q. 2 |
| ---: | :--- |
| Pas à la maison | 2 |
| Refuse | $9 \rightarrow$ REMERCIER ET TERMINER |

c) Dans ce cas, est-ce que je pourrais parler à la personne qui peut me donner l'information sur les abonnements de votre foyer? SE RE-PRESENTER, AU BESOIN. Laissez-moi vous assurer que l'information que vous fournirez est confidentielle et ne sera utilisée que pour des fins statistiques.
2. a) - Combien d'abonnements à des périodiques votre foyer reçoit-il?

$$
\begin{gathered}
\text { Nombre } \\
\text { Ne sais pas }
\end{gathered}
$$

b) Environ combien ces périodiques coûtent-ils au total par année?

$$
\begin{gathered}
\$ \\
\text { Ne sais pas } \\
888
\end{gathered}
$$

## SECTION B: RENSEIGNEMENTS SUR LES PERIODIQUES

3. J'aimerais vous poser quelques questions supplémentaires au sujet des périodiques auxquels votre foyer est abonné. Je sais que cela peut étre difficile, mais pourriez-vous me nommer jusquà 5 periodiques auxquels votre foyer est abonné et que vous recevez par le courrier? J'aimerais également savoir s'ils sont publiés ou dirigés au Canada ou pas. SONDER. NOTER LA RÉPONSE SOUS QUESTION 3 CI-DESSOUS.

INTERVIE WEUR: SI LE RÉPONDANT NE CONNAIT PAS LE NOM DU PÉRIODIQUE, DEMANDER QUEL EN EST LE CONTENU (consommateurs, affaires, écoles/éducation, arts/littérature, religion).
4. Depuis combien de temps environ votre foyer est-il abonné à ... LIRE LE NOM DE CHAQUE PÉRIODIQUE CITE $\boldsymbol{\lambda}$ Q.3. UN $\boldsymbol{\lambda}$ LA FOIS, ET NOTER LA RÉPONSE SOUS QUESTION 4 CI-DESSOUS.
5. Combien vous a cooté l'abonnement annuel à ... LIRE LE NOM DE CHAQUE PÉRIODIQUE CITÉ A Q.3, UN A LA FOIS, ET NOTER LA RÉPONSE SOUS QUESTION 5 CI-DESSOUS.
6. a) Si l'abonnement à ... (LIRE LE PREMIER NOM) coatait $10 \%$ de plus, c'est a dire (LIRE LE PRIX INDIQUE DANS LA COLONNE PERTINENTE DE LAA TABLE DE REFERENCE) au lieu de ... (LIRE LE PRIX CITÉ A Q.S), lauriez-vous tout de méme acheté? NOTER LA REPONSE SOUS QUESTION Ga) CI-DESSOUS. SI NON, PASSER AU PÉRKDIQUE SUIVANT.
b) $\quad$ pet si frabonnement cootait $20 \%$ de plus, c'est à dire $\$ \ldots \ldots$ ? NOTER SOUS QUESTION 6b) CI-DESSOUS. SI NON, PASSER AU PÉRIODIQUE SUIVANT.
c) ... et si l'abonnement coltait $30 \%$ de plus, c'est à dire $\$ \ldots \ldots$ ? NOTER SOUS QUESTION 6c) CI-DESSOUS.

REPRENDRE 6a) à (c) POUR CHACUN DES AUTRES PERIODIQUES.
7. Le périodique (LIRE LE PREMIER NOM) colte présentement $\$$ (LIRE LE PRIX DONNÉ $\AA$ Q. $)$ ). A quel prix trouveriez-vous l'abonnement tellement dispendieux que vous ne vous y abonneriez pas? ENREGISTRER SOUS QUESTION 7 CI-DESSOUS. REPRENDRE POUR CHAQUE TTTRE.
8. SI UN SEUL ABONNEMENT ACHETE, PASSER A Q.9.
a) Supposez que les prix d'abonnement aient augmenté au point que vous deviez renoncer à l'un des périodiques; dans ce cas, lequel laisseriez-vous tomber? NOTER LA RÉPONSE SOUS QUESTION 8a) CI-DESSOUS.
SI DEUX ABONNEMENTS ACHETES SEULEMENT, PASSER A Q.9.
b) Et si vous deviez renoncer à un deuxième périodique, lequel abandonneriez-vous? NOTER LA RÉPONSE SOUS QUESTION 3b) Cl-DESSOUS.

SI TROIS ABONNEMENTS ACHETESS SEULEMENT, PASSER A Q.9.
c) Et si vous deviez renoncer à un troisième périodique, lequel abandonneriez-vous? NOTER LA RÉPONSE SOUS QUESTION \&c) Cl-DESSOUS.

QUESTION 3:

| Titre: | A. |  | B. |  | c. |  | D. |  | E. | E. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Imprimé au Canada: |  |  |  |  |  |  |  |  |  |  |
| Oui |  | 1 |  | 1 |  | 1 |  | 1 |  | 1 |
| Non |  | 2 |  | 2 |  | 2 |  | 2 |  | 2 |
| Ne sais pas |  | 8 |  | 8 |  | 8 |  | 8 |  | 8 |

## QUESTION 4:

Moins de 2 ans
2 ans et plus
Ne sais pas

QUESTION 5:

QUESTION 6:
a) $10 \%$

Oui
Non
Ne sais pas
b)

20\%
Oui
Non
Ne sais pas
30\%
Oui
Non
Ne sais pas

QUESTION 7:
$\$$ $\qquad$
1
2
8

1
2
8


1

## QUESTION 8:

| a) ler périodique non acheté | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| b) $2 e$ périodique non acheté | 1 | 2 | 3 | 4 | 5 |
| c)e périodique non acheté | 1 | 2 | 3 | 4 | 5 |

## SECTION C: DONNEES DE BASE

Avant de terminer cette entrevue, j'aimerais vous poser quelques questions qui nous aideront à analyser vos réponses avec celles des autres foyers canadiens faisant partie de cette enquète. Ces renseignements ne serviront quà des fins statistiques.
9. Combien d'hommes et de femmes âgés de 18 ans et plus (y compris vous-même) habitent en permanence dans votre foyer? LIRE LA LISTE.
10. Et combien ont moins de 18 ans? LIRE LA LISTE.

Hommes
11. Quelle langue parlez-vous le plus souvent à la maison? NE PAS LIRE.

| Anglais | 1 |
| ---: | ---: |
| Français | 2 |
| Autre (préciser) |  |

12. Auquel des groupes d'âges suivants appartenez-vous? LIRE LA LISTE.

$$
\begin{array}{rr}
18 \text { à } 24 \text { ans } & 1 \\
25 \text { à } 34 \text { ans } & 2 \\
35 \text { à } 44 \text { ans } & 3 \\
45 \text { à } 54 \text { ans } & 4 \\
55 \text { à } 64 \text { ans } & 5 \\
65 \text { ans et plus } & 6 \\
\longrightarrow \text { Refuse } & 9
\end{array}
$$

NE PAS LIRE
13. Quel est le niveau de scolarité le plus élevé que vous avez complété? NE PAS LIRE LA LISTE.
Études élémentaires ..... 1
Études secondaires partielles ..... 2
Études secondaires complètes ..... 3
Études partielles en collège
communautaire ọu technique (CEGEP) ..... 4
Études complètes en collège
communautaire ou technique (CEGEP) 5
Études universitaires partielles ..... 6
Baccalauréat universitaire ou l'équivalent ..... 7
Études supérieures partielles ..... 8
Maîtrise, doctorat ou l'équivalent ..... 9
Refuse ..... 99
14. Laquelle des catégories suivantes décrit-elle le mieux votre situation d'emploi actuelle? LIRE LA LISTE.

| Employé(e) | 1 |
| ---: | ---: |
| Sans emploi | 2 |
| Au foyer | 3 |
| Etudiant(e) | 4 |
| A la retraite | 5 |
|  | 5 |
| $\longrightarrow$ Refuse | 9 |

15. Le revenu annuel total de votre foyer, avant impôt, est-il plus bas ou plus élevé que $\$ 40,000$ ?

16. A laquelle des catégories suivantes le revenu total de votre foyer, avant impôt appartientil? LIRE LA LISTE.


NE PAS LIRE $\rightarrow \begin{aligned} \text { Ne sais pas/incertain(e) } & 88 \\ \text { Refuse de répondre } & 99\end{aligned}$
17. Dans quel genre de municipalité vivez-vous présentement, est-ce ...
$\underset{(500,000+\text { habitants })}{\text { Dans un grand centre urbain }} \quad 1$

Dans une banlieue de grand ville 2 (Entre 50,001 et 499,999 habitants)

Dans une ville moyenne (entre 25,000 et 50.000 habitants) 3
Dans une petite ville (entre 5,000 et 25,000 habitants) 4
Dans un milieu rural (moins de
5,000 habitants) 5
NE PAS LIRE $\longrightarrow$ Ne sais pas 8
18. NE PAS DEMANDER, MAIS NOTER LES RENSEIGNEMENTS SUIVANTS:

Sexe: Homme 1
Femme 2

Date de l'entrevue:

Ville: $\qquad$

ANGUS, DOUGLAS E.
--Consumer sensitivity to increases in the price of magazine subscriptions

P
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C655
P76752
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DUE DATE

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[^0]:    1
    Econosult, Reaction of Canadian Periodical Readers to Higher Subscription Rates, Study for the Department of Communications, September 1985.

[^1]:    Cosper, Ronald L.. Magazine Reading in Canada, Final Report to the Department of Communications, December 1985.

[^2]:    6 Econosult, op.cit., p. 3-14.

[^3]:    ** Significant at 1\% level

    * Significant at $5 \%$ level

[^4]:    * Using Duncan's multiple test of significant differences those between the highest average number of subscriptions and others with asterisks are significant at the $5 \%$ level. Basically, this test produces multiple comparisons of mean (average) values between all groups. Asterisks in the matrix indicate significantly different group means. subscriptions.

[^5]:    ** Significant at $1 \%$ level

    * Significant at 5\% level

[^6]:    * Using Duncan's multiple test of significant differences those between the highest average annual expenditures and others with asterisks are significant at the $5 \%$ level. See notes Table 3.3.

    1 READS: Households with 5 adults reported average annual expenditures on magazine subscriptions of $\$ 94.38$.

[^7]:    8 Compare this with the elasticity results presented earlier, which indicated that for every $1 \%$ increase in the price of magazine subscriptions there would be a $3.1 \%$ decrease in quantity demanded. It should be remembered that this analysis refers to intentions of subscribers at the time of the survey and, as such, it may not be reasonable to infer these results to potential new subscribers.

