CAIS/ACSI: A MEMBERSHIP SURVEY

Ron MacKinnon and Michael Ridley
University of Guelph

INTRODUCTION

The Canadian Association for Information Science is now in its second decade of existence. As an organization, CAIS has experienced a steady growth, revealed not only in increased membership, but also in the quality of its conferences and publications. However, for an association to chart its path for the future, it must first understand where it currently stands.

In January 1982 a questionnaire was mailed to all CAIS members. The purpose of the survey was to determine salient characteristics of the CAIS membership and make useful comparisons with the recent survey of the membership of the American Society for Information Sicence (ASIS) (King 1980). Associations need an authenticated and accurate picture of themselves and it is hoped that the results of this survey will provide, in part, that view.

In total 480 questionnaires were mailed and as of the cut-off date of February 18, 219 had been received, a return rate of 45.6%. The data analysis was performed on the 219 returns, although the comments of questionnaires received after that date are also included.

What follows is not intended to be an exhaustive analysis of the complete questionnaire. Instead we have chosen to highlight key features which will be of general interest to the overall membership as well as underline specific findings which we feel to be important or significant.

GENERAL CHARACTERISTICS

Sex

Not unexpectedly, it was discovered that women outnumber men in CAIS, representing 61.1% of the association (Figure 1). As can be seen, the distribution by sex is generally the same as that of the ASIS membership.

Age

The tabulation of the age data produced some highly significant results reflecting the composition of the association (Figure 2). Most obvious is the overwhelming dominance of the 31-40 age group. With 55.4% of the membership, the prominence of this age sector may indicate an important orientation of CAIS. We appear to be a group which attracts individuals in the process of establishing careers and career credentials. This age group is traditionally dynamic and challenging for leadership positions. By way of contrast, only 32.8% of ASIS members fit into this category. We are very definitely an association dominated by newly established professionals, however we have a relatively small percentage of senior professionals. Only 30.9% of CAIS members are older than 40 as opposed to 51.1% of ASIS members.

One area of concern may be indicated by the finding that only 13.7% of our members are younger than 30. Certainly the need to attract young professionals is highlighted. Interestingly, while ASIS reported only 16% in this age sector, they did note that an American survey of scientists and engineers revealed that 25% were under 30. CAIS's relatively low membership in this area may reflect too low a profile in the educational institutions which generate new information professionals.

Language

It is encouraging to note that while 70.3% indicated English as their principal language, 29.1% were either French speaking or bilingual (Figure 3). The policy of CAIS to be a bilingual organization has contributed greatly to its strength and power.

Highest Degree

CAIS is a well educated group with over 75% holding advanced degrees (Figure 4). As might be expected, the MLS degree was the most common by a substantial margin (45.9%). While this same situation prevails in ASIS, the MLS is held by only 33.9% of its membership.

The distribution of degrees points to another potential area of concern. While more CAIS members hold dual masters degrees than ASIS members (12.2% to 8%), it is in the area of doctorates and non-MLS masters degrees where a significant difference arises. ASIS has nearly twice the percentage of PhD's and nearly three times the percentage of non-MLS masters degree holders. This could be crucial since members with these degrees represent individuals from non-information science backgrounds and they are therefore

representative of cross-disciplinary interest in information science. For CAIS to be truly a reflection of the information sector, it must attract people with diverse backgrounds, working in related areas. Concern over the relatively low number of PhD's (9.5%) may be tempered by the results of the previously noted survey of scientists and engineers where only 12.1% held doctorates.

Geographic Distribution

The geographic distribution of CAIS is generally well understood (Table 1). Nearly 80% (78.4%) are from Ontario and Québec. Such a distribution is to be expected given the general population concentration and the nature of the information sector, but one should note the respectable pockets of members developing in other parts of the country. Most significant is the 9.5% Alberta membership, suggesting strongly the need for an Alberta chapter.

JOB-RELATED CHARACTERISTICS

Sector

Possibly better than any other measure, the analysis of the primary sector of employment revealed the status of CAIS and its present orientation (Figure 5). To many it will come as no surprise that more than one third (38.8%) of our membership is employed by universities or colleges. The academic sector is challenged strongly, however, by the 35.9% of our members who are government workers (19.1% federal, 16.8% other governments). Combined, these sectors account for nearly three quarters of CAIS (74.7%).

Only 12.7% of members are employed in industry. This is an area of considerable concern since it may reflect the inability of CAIS to appeal to what is usually assumed to be the rapidly growing number of information industry workers. The contrast to ASIS in this case is striking. There, 35.6% work in industry, the largest single group by a substantial margin. This low participation rate by industry in Canada may also reflect the relative infancy of the information industry here.

As an aside, it is interesting to note that of those responding from the industry sector 85.7% were females. This reveals a dramatic distribution by sex not discovered in other categories.

General Functions/Job Titles

The tabulation of the data related to general functions (or

position) produced no surprises (Table 3). We are an association dominated by managers of one sort or another. It is interesting to note that of female CAIS members responding, 25.2% called themselves "Manager, Director, Head" as opposed to 36.9% of males. In the "Library Administration and Staff" category (not purely managerial) females responding outweighed the males 41.5% to 27.4%. The ASIS survey recorded a very similar distribution.

Primary Information Functions

Analysis of the data (Table 4) related to primary functions substantiates the prominance of managerial positions in the association. Management functions account for 43% of CAIS membership (Management of Information Programs, 18.6%, and other Operational Information Functions, 24.4%). This corresponds closely to the 45.6% of ASIS members who perform equivalent management duties.

From the point-of-view of sexual equality, 39.8% of women work in the two managerial categories whereas 48% of men are in management. While not obvious from Table 4, the total responses in the category "Searching for Information for others" reveal that 72.5% of respondents (in this the largest of the non-management related functions) are female.

The fact that only 5.9% of CAIS members are involved in either "Systems Analysis" or "Systems Design", as opposed to 9.9% of ASIS, is indicative of a lower participation of exclusively systems personnel.

The apparently large anomaly between CAIS and ASIS members involved in "consulting" (5.4% vs 0.4%) can be attributed to the fact that the ASIS survey distributed consultants amongst the specific areas of consulting specialty (e.g. management, systems design, etc.).

INCOME

The analysis of income data revealed an organization where relatively few members fit into the lower income ranges. As can be seen from Figure 6, 60.1% earn $30,000 or more, with 23.4% receiving $40,00 or more. The contrast with the ASIS data is, we feel, quite dramatic, even if adjustments were to be made for the fact that ASIS reports in 1979 U.S. dollars. Only 31% of ASIS members are in the $30,000 or more category while the less than $20,000 category holds 5.4% of CAIS and 34.1% of ASIS.

Since annual income is a factor which interests a wide group we have analyzed income data against a number of other variables.

When income is analyzed according to sex, a by now common pattern emerges. Table 5 indicates that while 21.4% of males make less than $30,000, almost 50% of females fall into those lower ranges. Conversely, 36.9% of males make $40,000 or more, while the corresponding figure for women is 16.3%. Ironically, the one respondent making over $60,000 was female.

Analysis of income by highest degree (Table 7) did not reveal any striking patterns with the two exceptions that follow.

Unlike the situation in ASIS, where an MLS degree does not correlate positively with the higher salary ranges (i.e. only 1.4% of ASIS members have MLS degrees and make $40,000 or more), in CAIS, fully 11% of the membership falls into that category.

An interesting plot of the MLS degree holder data again reveals an apparent sex bias. Figure 7 shows the percentage of female MLS holders in each income range. As can easily be seen, as the salary range increases, the percentage of women decreases.

Table 8 gives the results of analyzing income data by sector of employment. From that general data we have derived Table 9, indicating some particular characteristics and offering a general comparison with ASIS. This table analyzes the various employment sectors in an attempt to determine the nature of salary by sector. The high percentage of members in the "non-profit" and "other Government" sectors, who fall in the less than $20,000 range (i.e. 9.1% and 7.7%), indicates they are relatively low paying sectors. Conversely, the fact that 88.6% of federal employees and 73.6% of university employees make $30,000 or more indicates the high paying status of these sectors. The fact that 87.1% of the "self-employed/consultant" members of CAIS make $30,000 or more must be tempered by the observation that only 3.1% of total CAIS membership falls into this sector.

The distribution of income by sector for ASIS members is considerably different, however, as mentioned before, the ASIS figures are based on 1979 US dollars.

Examining income data by primary function, in the $30,000 or more categories (Table 10) shows that "searching for information on behalf of others" and "information preparation for others" are by far at the low end of the income scale. The two functions with zero percentages are anomalies, in that they contain only a single respondent each. High income functions include self-employed/consultants (85.7%), systems analysts (83.3%) and managers (82.9%).

SATISFACTION AND COMMENTS

Although an encouraging 79.4% indicated satisfaction, nearly 12% expressed significant dissatisfaction with the general state of CAIS (Figure 8). The danger with interpreting such a large vote of approval is that the membership may expect very little to begin with.

Comments received on the questionnaire fall into nine general areas of consideration:

- state of national executive/management
- communications
- nature/quality of conference
- chapter problems
- need for a western chapter
- non-library membership
- information science orientation
- fees
- miscellaneous

A number of people felt that the association had little stature or visibility and questioned the effectiveness of CAIS leadership. In a similar vein, the problem of communications within the organization was raised. The need for an effective and regular newsletter was mentioned. The quality of the annual conferences received both positive and negative responses. In light of the dominance of managers in the association the comment that the conference should address more management related issues should be considered. Problems related to the chapters included limited funding, lack of activity, scheduling of meetings and interactions with other associations. Many individuals noted the lack of a western chapter and, given the geographical distribution of our membership as discovered by this survey, such a chapter might easily be supported. A number of comments pointed out the need to attract non-library members, particularly representatives of the EDP and commercial sectors. The survey substantiated the low participation rates of systems personnel and those in the industry sector. In a similar concern, mention was made of the need to reassert the information science orientation of the association, replacing a perceived emphasis on librarianship. Two respondents urged CAIS to set higher membership fees in order to more effectively fulfill its mandate. Miscellaneous comments included a concern that the questionnaire represented an invasion of privacy, a belief that CAIS is in danger of being overly effected by the influence of the "profit-makers", the commercial sector and the need to concentrate on government lobbying and the education of policy makers.

CONCLUSION

As depicted by the results of this questionnaire, CAIS is a dynamic organization comprised of information science leaders performing in primarily managerial roles. We reflect the current state of the information sector in Canada and compare favourably with a sister organization such as ASIS. This survey has identified some salient characteristics of the membership allowing us to view the association from a new stand point. CAIS is a strong and vital organization capable of continued growth, increased visibility and new influence.

REFERENCES

King, Donald W., et al., "Profile of ASIS Membership.", Bulletin of the American Society for Information Science, 6 (August 1980), 9-17. All references to ASIS membership data are taken from this paper.

TABLE 1
Geographical Distribution By Province
(N=480,n=219)

Province of Residence	Number of Members	Percentage of Members
Ontario	121	55.2
Québec	51	23.2
Alberta	21	9.5
British Columbia	6	2.7
Nova Scotia	4	1.8
Other Provinces	5	2.2
Other North American	11	5.0

TABLE 2
Sector of Employment of CAIS Members (%)
(Male/Female Comparison)

Sector of Employment	% of Members	% of Males	% of Females
Industry	12.7	4.8	17.8
Non-Profit	4.5	4.8	4.4
Federal Gov't	19.1	23.8	16.3
Other Gov't	16.8	13.1	19.2
University	38.8	47.6	33.3
Self-Employed /Consultant	3.6	2.4	4.4
Other	1.8	1.2	2.2
Unemployed	1.8	2.4	1.5

TABLE 3
Job Titles of CAIS Members (%)

(Male/Female Comparison)

Job Titles Grouped According To General Function	% of Members	% of Males	% of Females
Education	10.9	16.7	7.4
Manager, Director, Head	29.6	36.9	25.2
Library Admin. & Staff	36.0	27.4	41.5
Information Scientist	12.3	13.1	11.8
Other Scientists, Researchers	0.9	2.4	0
Engineers	0.4	0	0.7
Other Professions	3.1	1.2	4.4
Office Workers	0	0	0
Sales & Marketing	1.3	1.2	1.5
Retired or Unemployed	1.3	1.2	1.5
Other	0.9	0	1.5
No Response	2.7	0	4.4

TABLE 4
Primary Information Functions Performed By CAIS Members
(N=480,n=219)

Primary Function	(%) FEMALE	(%) MALE	(%) CAIS	(%) ASIS
Systems Analysis	4.6	0.0	2.9	3.6
Systems Design	2.9	1.0	2.6	6.3
Management of Inf'n Programs, Services or Databases	15.0	24.4	18.6	28.7
Information Preparation for Others	7.0	6.8	6.9	7.4
Information Analysis for Others	3.4	4.0	3.7	4.2
Searching for Information for Others	16.8	7.8	13.5	11.7
Other Operational Information Functions	24.8	23.6	24.4	16.9
Educating Information Workers	7.5	11.8	9.1	9.1
Information Research & Development	2.3	7.8	4.4	4.9
Marketing Inf'n Programs, Services or Databases	2.9	2.0	2.5	2.7
Consulting	5.8	5.0	5.4	0.4
Fields Other than Information	2.3	1.0	1.8	0.6
Unemployed or Retired	0.5	1.0	0.7	0.2
No Response	4.1	4.0	4.0	3.3

TABLE 5
Annual Income of CAIS Members (%) by Sex

Sex	ANNUAL INCOME							No Response
	10000	10000-19999	20000-29999	30000-39999	40000-49999	50000-59999	60000	
Male	1.2	2.4	17.8	39.3	25.0	11.9	0	2.4
Female	2.2	4.4	43.0	34.1	12.6	2.2	1.5	1.5

TABLE 6
Annual Income by Age of CAIS Members (%)   (N=480,n=219)

Age Range	ANNUAL INCOME						Total
	$\leq$ 10000	10000-19999	20000-29999	30000-39999	40000-49999	$\geq$ 50000	
$\leq$25	0.4	0	0.4	0	0	0	0.8
26-30	0.9	0.9	9.3	1.8	0	0	12.9
31-40	0	2.8	17.7	25.2	7.9	1.8	55.4
41-50	0	0	4.2	5.6	4.6	0.4	14.8
51-60	0.4	0	2.3	3.7	4.6	3.7	15.3
61-70	0	0	0	0.4	0.4	0	0.8
Total	1.7	3.7	33.9	36.7	17.5	5.9	100

TABLE 7

Annual Income by Highest Degree Held of CAIS Members (%)

(N=480,n=219)

Higest Degree Held	ANNUAL INCOME					
	≤ 10000	10000-19999	20000-29999	30000-39999	40000-49999	≥ 50000
PhD	0.4	0	1.8	2.3	2.7	2.3
MD	0	0	0	0	0.4	0
MA/MS	0.4	0.4	2.3	3.7	0.9	0
MLS	0.4	2.7	17.5	14.4	8.3	2.7
Dual Masters	0	0.4	5.0	4.1	1.8	0.9
BA/BS	0.4	0	6.0	9.7	3.2	0
Other	0	0	0.9	1.3	0.4	0

TABLE 8

Annual Income (1982) of CAIS Members (%) by Sector of Employment

(N=480,n=219)

Sector of Employment	% of Members In Sector	ANNUAL INCOME					
		≤ 10000	10000-19999	20000-29999	30000-39999	40000-49999	≥ 50000
Industry	13.3	0	0.4	7.4	3.2	2.3	0
Non-Profit	4.4	0	0.4	1.8	1.8	0.4	0
Federal Government	19.3	0	0.4	4.1	10.2	2.3	2.3
Other Government	16.8	0	1.3	7.4	5.5	1.3	1.3
University	38.3	0	0.4	12.0	12.5	11.1	2.3
Self-Employed /Consultant	3.1	0	0	0.4	2.7	0	0
Other	2.1	0.9	0.4	0.4	0.4	0	0
Total		0.9	3.3	33.5	36.3	17.4	5.9

TABLE 9

Annual Income by Sector of Employment (CAIS/ASIS Comparison)
(N=480,n=219)

Sector of Employment	CAIS Members			ASIS Members		
	% of Sector <20000	% of Sector ≥ 30000	% of Sector ≥ 50000	% of Sector <20000	% of Sector ≥ 30000	% of Sector ≥ 50000
Industry	3.0	41.1	0	33	·30	5
Non-Profit	9.1	50.0	0	36	26	3
Federal Government	2.1	76.7	11.9	13	50	5
Other Government	7.7	48.2	0	44	16	1
University	1.0	67.6	6.0	35	30	5
Self Employed/ Consultant	0	87.1	0	40	32	5

TABLE 10

Annual Income of CAIS members by Primary Information Function
(N=480, n=219)

Primary Function	% earning $30,000
Systems Analysis	83.3
Systems Design	0
Management of Inf'n Programs, Services or Databases	82.9
Information Preparation for Others	28.6
Information Analysis for Others	0
Searching for Information for Others	21.0
Other Operational Information Functions	60.7
Educating Information Workers	75.0
Information Research & Development	62.5
Marketing Inf'n Programs, Services or Databases	33.3
Consulting	85.7
Fields Other than Information	75.0

FIGURE 1
Sex of Cais Members (N=480,n=219)

Figure showing proportion of members (%) by sex for CAIS and ASIS. Male (CAIS) 39.4, Female (CAIS) 61.6, Male (ASIS) 44, Female (ASIS) 56.
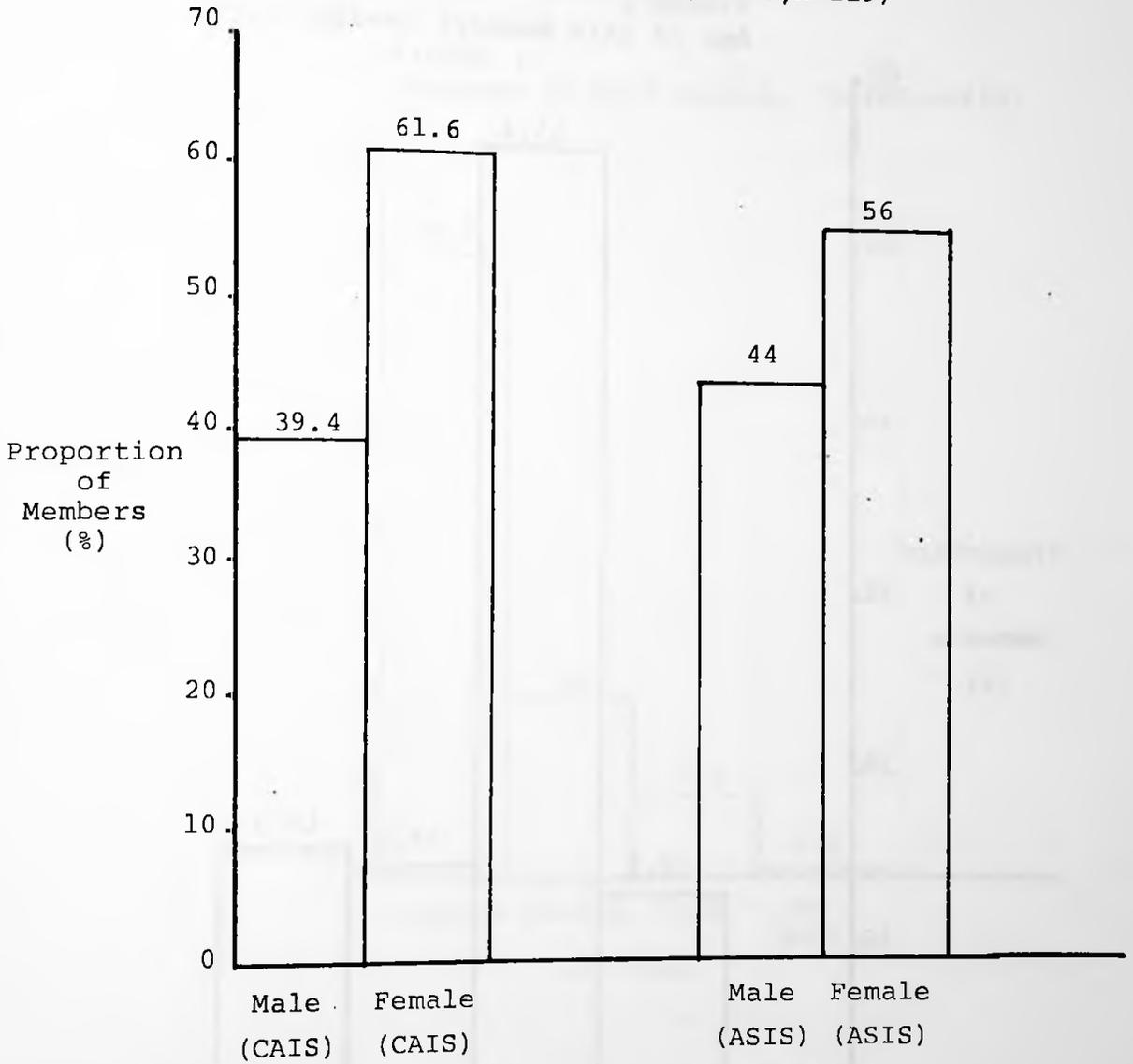
FIGURE 2
Age of CAIS Members (N=480,n=219)
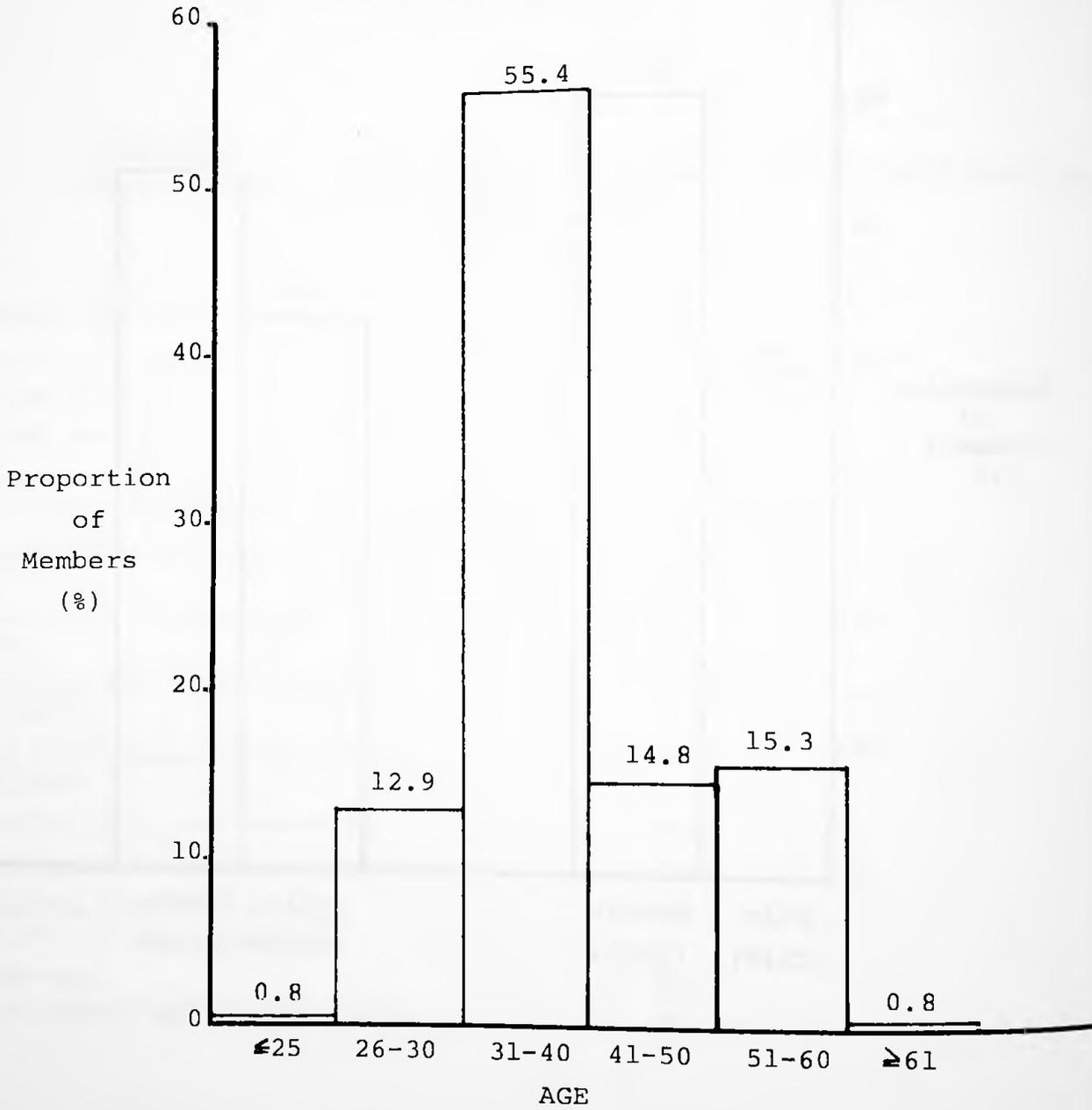
FIGURE 3
Language of CAIS Members (N=480,n=219)
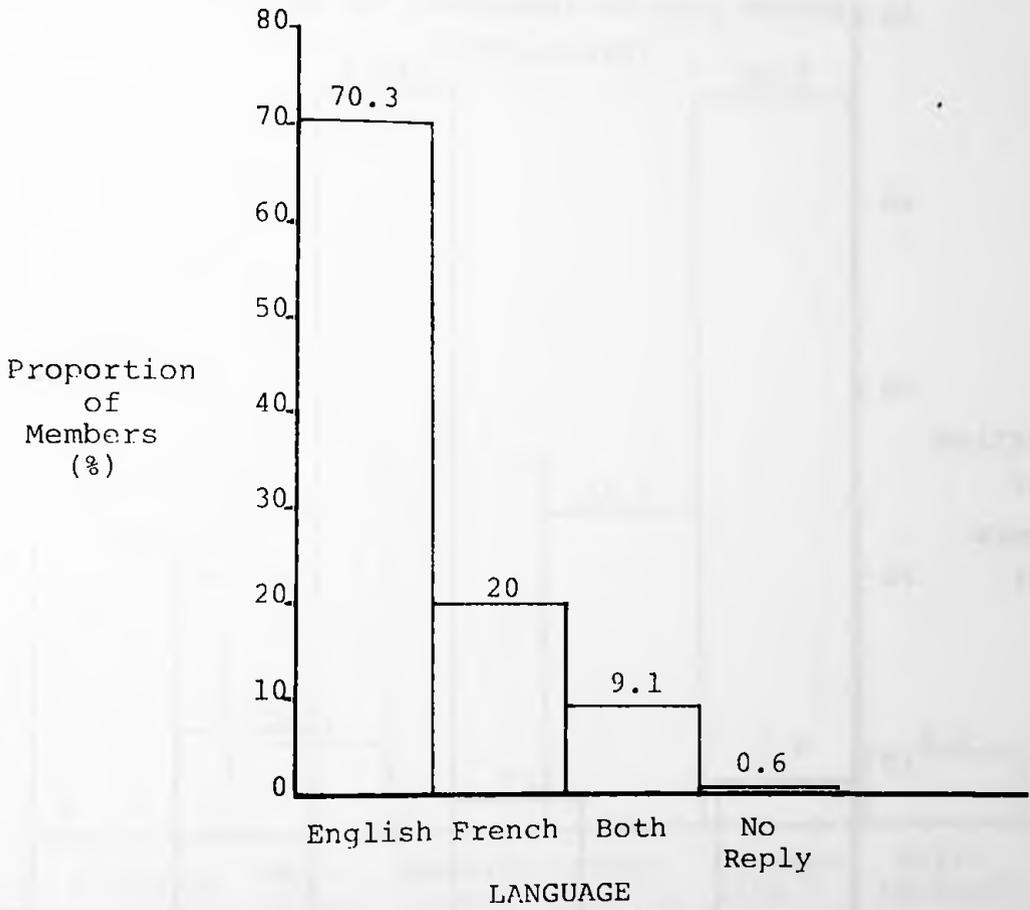
FIGURE 4
Highest Degree Held By CAIS Members (N=480,n=219)
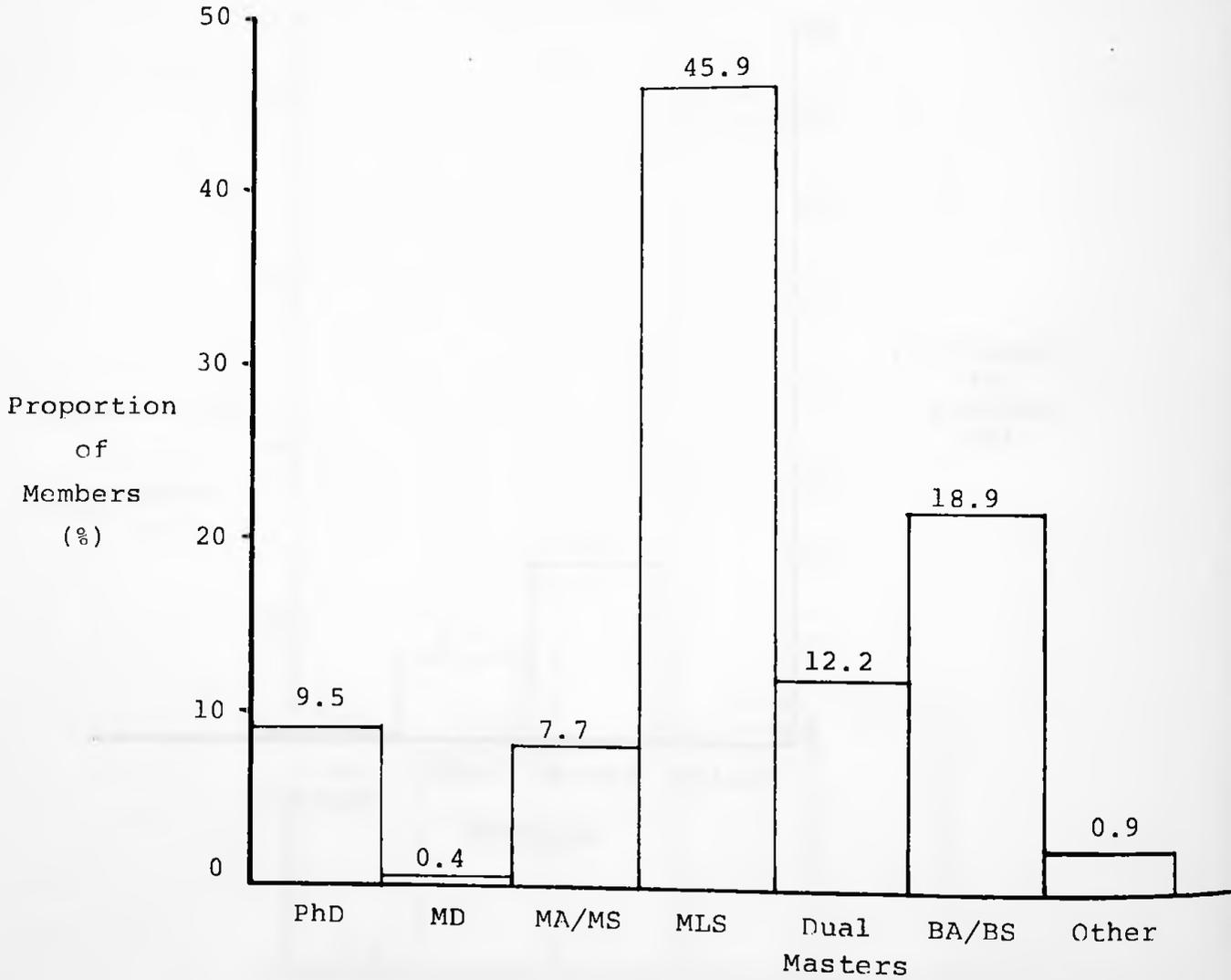
FIGURE 5
Sector of Employment of CAIS Members
(N=480,n=219)
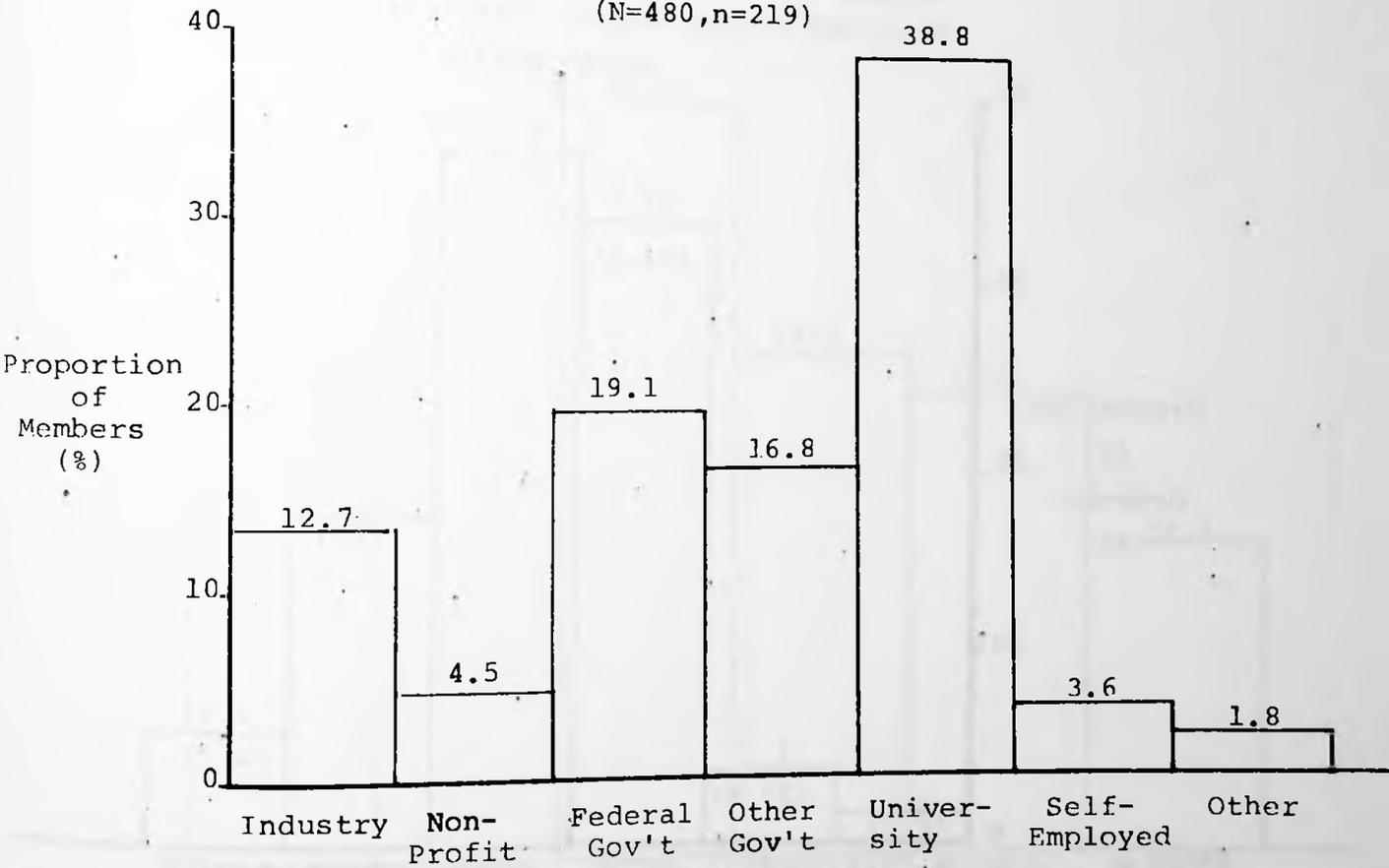
FIGURE 6
Reported Annual Income (1982) of CAIS Members *
(N=480,n=219)
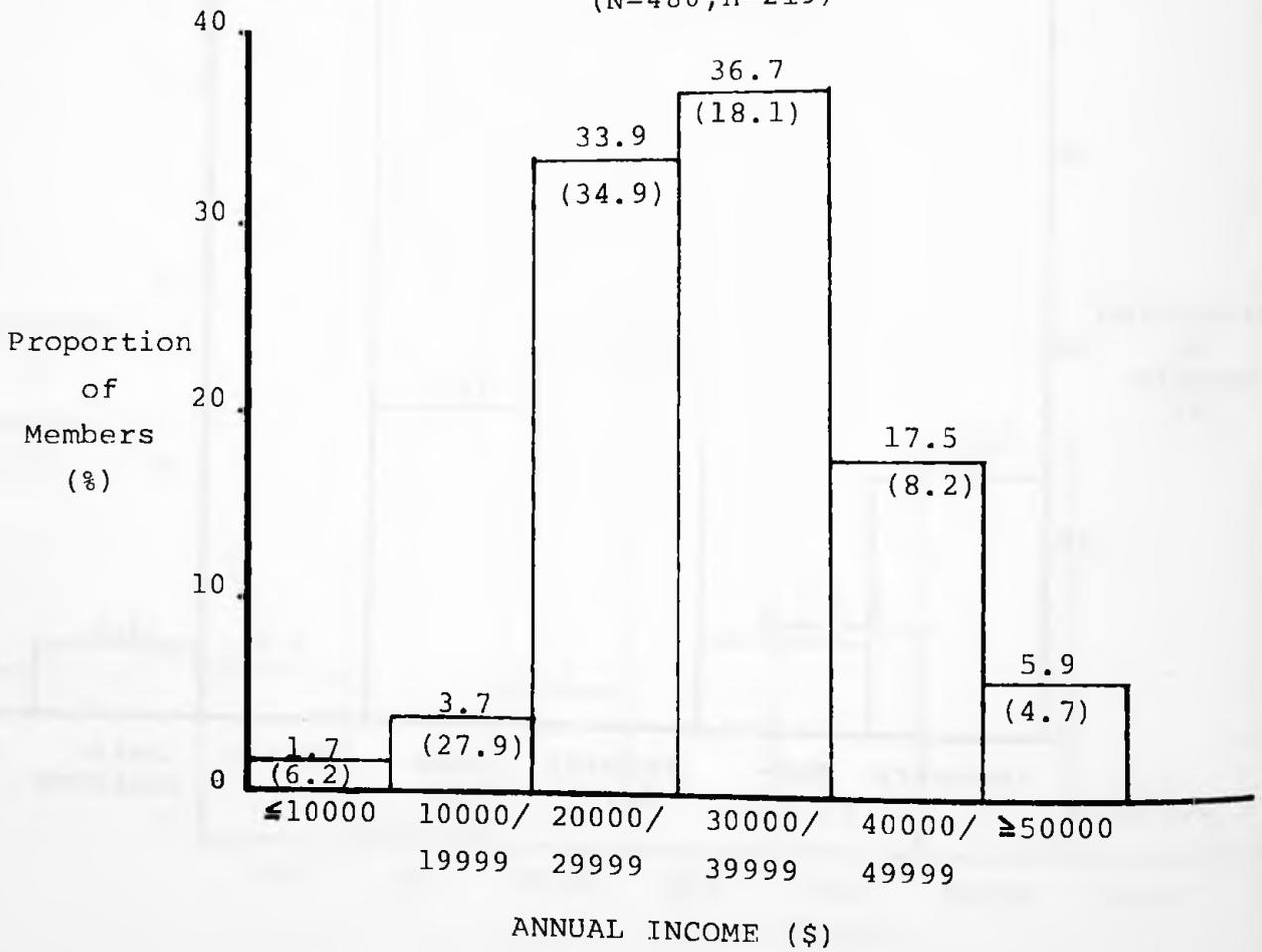
*Numbers in parentheses are the coresponding percentages for ASIS

FIGURE 7
Percentage of Female MLS Holders in Each Income Range
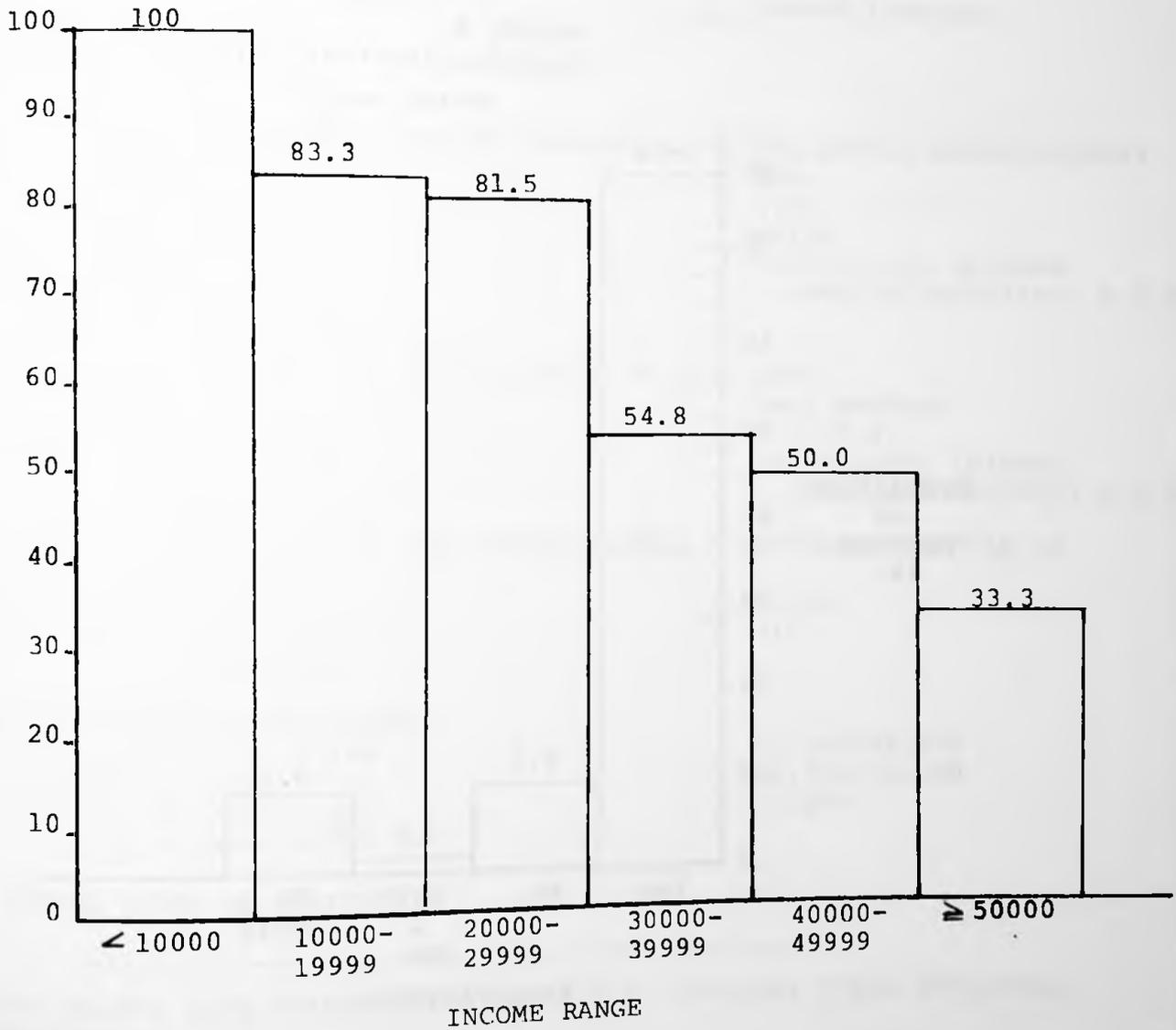
FIGURE 8
Satisfaction With CAIS (%)

(N=480,n=219)

Proportion of Members (%)

SATISFACTION
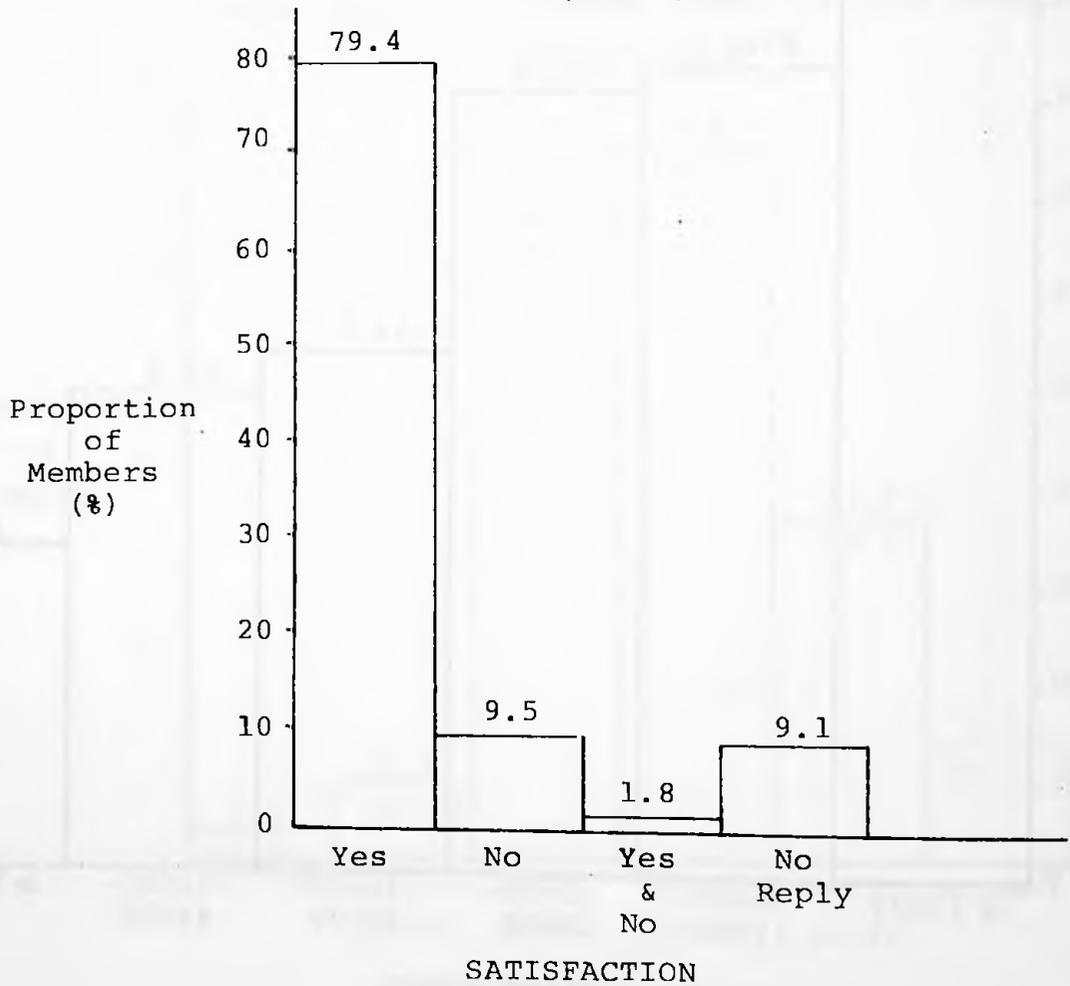
CAIS/ACSI
MEMBERSHIP SURVEY/QUESTIONNAIRE DE MEMBRES

1. AGE/ÂGE:

___ -25
___ 26-30
___ 31-40

___ 51-60
___ 61-70
___ 71-

2. SEX/SEXE:

___ male/masculin

___ female/feminin

3. LANGUAGE/LANGUE:

___ english/anglais

___ french/français

4. PROVINCE:

_____

5. MEMBERSHIPS IN OTHER ASSOCIATIONS/MEMBRE DE QUELLES AUTRES ASSOCIATIONS:

___ CLA
___ ASTED
___ CIPS
___ ASIS

___ ALA
___ IIA
___ AFIPS
___ other/autre (please
    specify/spécifiez, s.v.p
___

6. HIGHEST DEGREE HELD/GRADE UNIVERSITAIRE LE PLUS HAUT:

___ Ph.D
___ M.D.
___ M.A./M.S.
___ M.L.S.

___ dual masters
___ B.A./B.S.
___ other/autre (please
    specify/spécifiez, s.v.p

7. YEARS OF EXPERIENCE SINCE LAST DEGREE/ANNÉES D'EXPÉRIENCE DEPUIS LE
   DERNIER GRADE:

___ 0-4
___ 5-10
___ 11-20

___ 21-30
___ 31-

8. ANNUAL INCOME/SALAIRE ANNUEL:

___ - 9,999
___ 10,000-19,999
___ 20,000-29,999
___ 30,000-39,999

___ 40,000-49,999
___ 50,000-74,999
___ 75,000-

9. JOB TITLE/TITRE DE POSITION:

_____

10. PLEASE SELECT YOUR PRIMARY EMPLOYER/S.V.P. INDIQUEZ VOTRE EMPLOYEUR
    PRINCIPAL:

___ industry/industrie
___ non-profit
___ federal gov't/gov't fédéral
___ other gov't/autre gov't
___ university, college/université, collège
___ self-employed, consultant/indépendent, conseilleur
___ other (including students)/autre (comprenant des étudiants)
___ unemployed/inoccupé

11. PLEASE SELECT THE CATEGORY WHICH BEST DESCRIBES YOUR POSITION/S.V.P., INDIQUEZ QUELLE CATÉGORIE DÉCRIT LE MIEUX VOTRE SITUATION:

_____ education
_____ manager, director, head/gérant, directeur, chef
_____ library admin. and staff/administrateur de bibliothèque et personnel
_____ information scientist/specialistes de l'information
_____ other scientists, researchers/autres savants, recherches
_____ engineers/ingénieurs
_____ other professions/autres professions
_____ office workers/employés de bureau
_____ sales and marketing/ventes et marketing
_____ retired or unemployed/en retraite ou inoccupé

12. PLEASE SELECT THE CATEGORY WHICH BEST DESCRIBES WHAT YOU DO/S.V.P., INDIQUEZ QUELLE CATEGORIE DÉCRIT LE MIEUX CE QUE VOUS FAITES:

_____ systems analysis/analyse de systèmes
_____ systems design/dessin de systèmes
_____ management of information programs, services, or databases (e.g. MIS, database administrators)/direction des programmes, des services, ou des banques de données d'information (e.g. système intégré de gestion, gestion de banques de données)
_____ information preparation on behalf of others/préparation d'information en faveur d'autres
_____ information analysis on behalf of others/analyses d'information en faveur d'autres
_____ searching for information on behalf of others/rechercher l'information en faveur d'autres
_____ other operational information functions (e.g. supervising a library or automated reference unit)/autres fonctions opérationnelles d'information (e.g. surveillance d'une bibliothèque ou d'un système automatique)
_____ educating information workers/éducation des travailleurs d'information
_____ information research and development/recherches et développement d'information
_____ marketing information programmes, services or databases/marketing des programmes, des services ou des banques de données d'information
_____ consulting/consultation
_____ fields other than information/autres domaines que l'information
_____ unemployed or retired/inoccupé ou en retraite

13. HOW MANY YEARS HAVE YOU BEEN A CAIS MEMBER/COMBIEN D'ANNÉES AVEZ-VOUS ÉTÉ MEMBRE DE L'ACSI:

_____

14. WHAT CHAPTERS OF CAIS ARE YOU AFFILIATED WITH/DE QUELLES SECTIONS DE
L'ACSI ÊTES-VOUS AFFILIÉ:
      ___ Toronto
      ___ Ottawa   ___ Montréal
                                                    ___ Quebec

15. HOW MANY CAIS CONFERENCES HAVE YOU ATTENDED IN THE PAST 3 YEARS/À
COMBIEN DES CONFÉRENCES ANNUELLES DE L'ACSI AVEZ-VOUS ASSISTÉ:
      _____

16. IN GENERAL, ARE YOU SATISFIED WITH CAIS/EN GÉNÉRAL, ÊTES-VOUS SATISFAIT
DE L'ACSI:
      ___ yes/oui   ___ no/non

Thank you for your response. Please make any additional comments.
Nous vous remercions bien de votre réponse. S'il vous plaît, veuillez
faire des observations additionnelles.

Please fold on dotted lines, seal and mail to address indicated on reverse.