

A Study Of Public Awareness Of Speech-Language Pathology: Then And Now

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Abstract:

In 1980, a survey of public awareness of Speech-Language Pathology was conducted in London, Ontario, a city of 250,000. Two hundred and sixty-four questionnaires were completed by members of the public in a local shopping mall. This study was replicated in 1985 to investigate current awareness of Speech-Language Pathology and to compare results with those obtained in 1980. Results suggested that public awareness of Speech-Language Pathology is less than what would be desirable for the development of the profession and the effective delivery of services to the communicatively handicapped. Results also indicated the lack of improvement in public awareness in the five-year period intervening between the two samples. Effective methods of informing the public regarding the role of the Speech-Language Pathologist and of increasing the visibility of the profession are discussed.

Introduction

The purpose of this study was to survey public awareness of Speech-Language Pathology and knowledge of communicative disorders in London, Ontario, a city of 250,000. This investigation was motivated by the authors' experiences with "May is Speech and Hearing Month" public awareness campaigns and with personal experiences indicating that most people have very little information about Speech-Language Pathology.

Since no Canadian survey of public awareness of Speech-Language Pathology was available, it was decided to conduct a preliminary, nonprobability questionnaire survey of the London public in a shopping mall. This survey was conducted in 1980 with 264 people completing questionnaires (Husband, 1980). This investigation was replicated five years later, in 1985, with 252 people completing identical questionnaires in the same shopping mall in London.

The primary goal of these projects was the examination of the public's knowledge of communicative disorders and of the profession of Speech-Language Pathology. The study was replicated to compare results with those obtained in 1980, thus providing an estimate of the changes in public awareness over the five-year period.

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A secondary goal of both projects was to arouse curiosity and to promote awareness of communicative disorders, Speech-Language Pathology as a profession, and services available at the local level.

Method

1. Questionnaire Design

The questionnaire included sections designed to determine what opportunities respondents had had to learn about Speech-Language Pathologists, what they believed a Speech-Language Pathologist is, their knowledge of when children should be referred for speech and language evaluation, what types of disorders they thought Speech-Language Pathologists treat and finally, respondent characteristics.

The questionnaire evolved through several versions before reaching its final form. The final version of the questionnaire included a cover illustration and was professionally typed and reproduced.

In replicating the investigation five years later, the same questionnaire was utilized with the exception of a few minor changes. A copy of the 1985 questionnaire is appended (see Appendix).

2. Questionnaire Administration

Procedures used to administer the questionnaires were identical in the 1980 and the 1985 versions.

Both investigations were conducted over a three-day period in one of London's largest shopping malls. Questionnaires were administered by the author and 3 to 5 assistants at a time. The assistants were instructed regarding the purpose of the study and the importance of not giving away or biasing respondents' answers in any way. Questions or problems of the respondents were referred to the senior author.

As shoppers approached the display from a considerable distance, they observed tables laid with refreshments, colourful brochures, books, attractive therapy materials, a videotape of familiar songs being interpreted in manual sign language and easels bearing posters which read "Free refreshments for anyone 18 or over completing our questionnaire." Behind and in front of the tables, large display posters announced: "We'd like to talk to you about ... Speech-Language Pathology."

All posters were designed to arouse curiosity while communicating as little information as possible.

Those who agreed to complete the questionnaire were seated and provided with refreshments, a consent form and a questionnaire.

3. Questionnaire

For the 1980 sample, data were keypunched from the coded transfer sheets and verified by a teaching assistant experienced in keypunching. Key punching errors and remaining coding errors detected by computer verification of the data were corrected and quality control measures were repeated. On the single occasion in which two errors were found on the same transfer sheet, all twelve data cards for that transfer sheet were rechecked. Finally, frequency distributions for each variable and cross-tabulations of age by sex and education by sex were computed.

For the 1985 sample, data were entered onto a floppy diskette using an IBM Personal Computer. Data entries were verified by a Statistical Laboratory staff member with corrections and quality control measures repeated as required. Frequency distributions were calculated for each variable in the 1985 sample. Cross-tabulations of respondents' knowledge of Speech-Language Pathology and communicative disorders and a number of respondent characteristics were computed. (Siegel, 1956).

Following the cross-tabulations, further statistical analysis was required to compare the groups defined by the categorizations. Most items were represented as categorical variables and were analyzed by a chi-square test to detect significant differences in proportions between the groups (Siegel, 1956).

The remaining items were ordinal (e.g., education levels, family income levels, knowledge of place of work and training required for a Speech-Language Pathologist, and the behaviour profiles) and were analyzed to detect significant differences in the mean. The Mann-Whitney test was employed when there were two groups to be compared. In instances where there were three groups, a similar test, the Kruskal-Wallis was employed. Since the mean and median are both measures of central tendencies of a sample, the Mann-Whitney test is analogous to the t-test, but in a non-parametric setting. Similarly, the Kruskal-Wallis test is analogous to the F-test.

Similar statistical analysis was used to compare results obtained from the 1980 sample with those obtained in the 1985 survey. In addition, items such as age and socio-economic levels were considered as continuous variables and were computed using a t-test to detect significant differences in the means.

Results

The following presentation provides results from the 1985 survey and the comparison of data obtained from the 1980 and 1985 samples.

The total sample size for the 1985 survey was 252 and 264 for the 1980 sample. Results for the various sections were as follows:

1. Respondent Characteristics: 1985 Sample

The characteristics of the respondents are summarized in Table 1. When examining Table 1, one can see

that the highest percentage of respondents falls in the 20 to 34 age group.

Table 1: Respondent Characteristics by Percent of 1985 Sample

Characteristic	Level	% of Sample
Sex	male	34.5
	female	65.5
Age (years)	18-19	10.3
	20-24	20.2
	25-34	28.2
	35-44	10.7
	45-54	9.9
	55-64	11.5
	65-69	6.3
	70 or more	2.8
Any children	yes	46.4
	no	53.6
Number of children	0	53.6
	1	12.7
	2	15.9
	3	9.9
	5	0.8
	6	1.6
Those with children aged	under 2 years	5.6
	2 to 4 years	8.3
	5 to 9 years	7.1
	10 to 12 years	4.4
	13 to 14 years	3.2
	15 to 19 years	8.0
	20 or over	24.2
Highest level of educ.	grade 4 or less	0.0
	grade 5 to 8	3.6
	grade 9 or 10	3.2
	grade 11 to 13	24.2
	non-university	
	post-secondary	31.0
	some university	16.3
	bachelor's degree	14.3
graduate degree	7.5	
Occupational Field	health, education	24.6
	other fields	75.4
Blishen Index	low (less than 40)	27.8
	mid (40 to 60)	34.9
	high (over 60)	37.3
Total 1984 family income before taxes	\$ 5,000 or less	2.0
	\$ 5,001 — \$10,000	4.8
	\$10,001 — \$15,000	8.1
	\$15,001 — \$20,000	10.9
	\$20,001 — \$25,000	12.1
	\$25,001 — \$30,000	13.3
	\$30,001 — \$35,000	9.3
	\$35,001 — \$40,000	8.1
	\$40,001 — \$45,000	6.9
	over \$45,000	24.6
missing	1.6	

Living within London city limits		
no		7.5
< 6 months		10.7
6 - 12 months		6.7
1 - 2 years		7.1
over 2 years		67.9

Number of missing observations = 0

Just under half of the respondents reported having children with families with 3 or more children under-represented in favor of those with 2 or fewer children.

With regard to education, it appears that the sample is biased toward the inclusion of individuals with formal post-secondary education, in health or education related fields.

Data on socio-economic status and total annual income before taxes suggest that socio-economic status and family income may be biased toward the middle and higher levels.

Finally, 92.4% of the sample reported that they live within London city limits with the majority (67.9%) living in London for over 2 years.

2. General Knowledge of Speech-Language Pathology: 1985 Sample

2.1 Opportunities to Learn About Speech-Language Pathologists

Nearly half of the respondents indicated that they had never seen, heard, or read anything about Speech-Language Pathology.

Among those who had the most frequently encountered sources of information from highest to lowest percentage of respondents were magazines, newspapers, brochures, television, and books. Relatively few respondents had been reached through lectures, talks, open house, display, or radio.

Approximately 22% of the respondents believed that they had met a Speech-Language Pathologist, while 21% reported believing they knew someone who knew a Speech-Language Pathologist.

2.2 What is a Speech-Language Pathologist?

Nearly 205 of the sample did not correctly name a place in London where a Speech-Language Pathologist was employed while over 80% correctly named at least one such place. The wide variety of incorrect responses included such places as the Public Library, the Red Cross Society, Bell Canada, the Courthouse, the Canadian National Institute for the Blind, and the Royal Conservatory of Music.

Approximately half of the sample indicated that a referral from one's family physician was necessary in order to see a Speech-Language Pathologist. A small percentage of the respondents indicated they did not know the answer to this question or that a referral might be required by one facility and not another.

With regard to the training of Speech-Language Pathologists, 62.7% of the respondents indicated that four or more years of post-secondary education were required. About 12% believed two years or less were required. One individual commented that common sense was all that was needed.

Although over 90% of the sample indicated that a "Speech-Language Pathologist" could also be called a "Speech Therapist", over half (55.2%) believed a Speech-Language Pathologist was the same as a "Speech Correctionist".

In completing the sentence, "A Speech-Language Pathologist is someone who ...", most respondents provided vague or limited information, typically referring only to the correction of speech defects or errors of pronunciation. Just over 58% of the sample provided incorrect responses, left the answer blank, or wrote "don't know". Generally, correct and complete responses were very unusual.

3. Knowledge of Communication Disorders: 1985 Sample

3.1 What Age Groups do Speech-Language Pathologists Treat?

This section of the questionnaire dealt with the specifics of age groups and types of communicative disorders normally referred for assessment and treatment.

Most respondents (91.3%) indicated that Speech-Language Pathologists work with grade school children, while more than 75% believed they work with preschoolers, teenagers and adults. In contrast, only 36.1% thought Speech-Language Pathologists deal with infants. One-third of the total sample believed that Speech-Language Pathologists work with all the age groups listed.

3.2 Which Children Should be Referred for Evaluation?

Respondents were asked to judge whether the children described in seven behaviour profiles should be referred for assessment by a Speech-Language Pathologist.

Only one quarter of the total sample were able to make correct judgements on more than two of the seven behavioural profiles. Respondents were best able to make correct judgements on profiles describing language disorders in school-age children. They were most likely to incorrectly evaluate profiles describing a voice disorder, language delay in young children and a fluency disorder.

3.3 What Types of Disorders do Speech-Language Pathologists Treat?

The respondents' decisions about what types of disorders Speech-Language Pathologists treat are summarized in Table 2.

It is apparent from the table that few individuals had difficulty recognizing "decoy items" such as pneumonia, leukemia and tonsillitis. The most difficult of these questions ("adults who lose their eyesight" and "senile peo-

ple") were still more often correct than the easiest of the remaining questions ("adults who stutter or stammer"). The majority of the sample correctly identified the "stuttering" choice.

Although most of the respondents could identify $\frac{3}{4}$ of the disorders correctly, less than 10% could identify all the appropriate choices.

Table 2: Judgement of Types of Disorders Treated by Speech-Language Pathologists by Percent of 1985 Sample

Types of Disorders Treated	Percent of Sample	
	Yes	No
People with diseases or injuries of the brain	73.0	27.0
People with hearing loss	72.6	27.4
Adults who stutter or stammer	91.7	8.3
Autistic children	61.5	38.5
People with pneumonia	1.6	98.4
Mentally retarded people	56.7	43.3
People with voice box or vocal cord removed	76.2	23.8
People who have had strokes	78.2	21.4
Adults who lose their eyesight	4.4	95.6
People with cleft palate or hare lip	71.8	28.2
People with strained voices	39.7	60.3
People with leukemia	2.0	98.0
Senile people	6.3	93.7
People with muscle diseases	44.0	56.0
People with tonsillitis	6.0	94.0

Number of missing observations = 0

4. Other Observations: 1985 Sample

Interesting anecdotal information was obtained from respondents who chose to add their own comments at the end of the questionnaire. Some respondents indicated they were made aware of Speech-Language Pathology because of a family member's needs:

"I credit a Speech-Language Pathologist with getting my Mother's speech abilities together after her first stroke. My regard for the profession is very high".

"We knew little or nothing about the subject until my husband faced a total laryngectomy. We learned a great deal in a very short time. Unfortunately, it's a subject few people get involved in unless of absolute necessity. I sincerely hope that your services will always be available to those in need of them."

A few respondents admitted having very limited knowledge of the profession:

"I realize that I know very little about the work of a Speech-Language Pathologist, but I would like to know more."

Some respondents indicated that the present investigation was meeting the goal of increasing public awareness, while many felt that much more should be done:

"I applaud your efforts to educate the public regarding the wide variety of conditions Speech-Language Pathologists treat." "Obviously, some marketing and educational resources are required by your profession to 'spread the word'."

And finally, a young mother commented:

"I think Speech-Language Pathologists do great work. The problem appears to be in getting to see one if the need arises. There are just too many long waiting lists."

5. Effects of Response Characteristics on Knowledge of Speech-Language Pathology and Communicative Disorders: 1985 Sample.

Data from the 1985 sample were analyzed to compare knowledge of Speech-Language Pathology and communicative disorders across a number of respondent characteristics included: sex, income level (high, mid, low), socio-economic level (high, mid, low), education level, type of occupation and whether respondents have children or not. The following presentation provides the results of this analysis.

The analysis revealed few significant differences with respect to sex and no significant differences were found with respect to income levels of the respondents. However, the higher the socio-economic level of the respondents, the more likely they were to have some information about Speech-Language Pathology [chi-square (1 d.f.) = 13.07; $p = .0014$], to have met a Speech-Language Pathologist [chi-square (1 d.f.) = 9.38; $p = .0092$], and to be able to provide a more accurate and complete definition of a Speech-Language Pathologist (K-W H-statistic = 9.948; $p < .025$).

Respondents with at least some university education were more likely to have some information about Speech-Language Pathologists [chi-square (1 d.f.) = 32.83; $p = .0000$], to have met a Speech-Language Pathologist [chi-square (1 d.f.) = 8.97; $p = .296$] or to know someone who knows a Speech-Language Pathologist [chi-square (1 d.f.) = 9.66; $p = .0217$]. These respondents were more likely to correctly name places employing Speech-Language Pathologists (K-W H-statistic = 8.861; $p < .05$); the amount of training required [chi-square (3 d.f.) = 13.44; $p < .005$] and to know more about the age groups normally treated by Speech-Language Pathologists (K-W H-statistic = 9.94; $p < .025$). They were better able to define a Speech-Language Pathologist by including more components considered essential to the definition (K-W H-statistic = 33.23; $p < .001$).

Respondents' occupation had the most significant effects on knowledge of Speech-Language Pathology and communicative disorders. Respondents in health- or education-related professions were more likely to have

some information about Speech-Language Pathology [chi-square (1 d.f.) = 13.65; $p = .0002$], to have met a Speech-Language Pathologist [chi-square (1 d.f.) = 16.45; $p = .0001$] or to know someone who knows a Speech-Language Pathologist [chi-square (1 d.f.) = 10.52; $p = .0012$]. They were more familiar with places where a Speech-Language Pathologist would be employed (Mann-Whitney Test; $p = .0105$), and to know the amount of training required by a Speech-Language Pathologist [chi-square (1 d.f.) = 7.39; $p < .01$]. They could more accurately define a Speech-Language Pathologist (Mann-Whitney Test, $p = .0077$). In general, this group of people were more aware of the disorders normally treated by a Speech-Language Pathologist.

Finally, respondents with at least one child were less likely to correctly identify the age groups treated by Speech-Language Pathologists (Mann-Whitney test; $p = .0044$).

Results of this analysis of the data reveal that the subgroup of respondents with the most accurate and complete knowledge of Speech-Language Pathology and communicative disorders are female from higher socio-economic levels, with at least some University training in health- or education-related professions, with no children.

6. Comparison of Results: 1980 Sample and 1985 Sample

6.1 Comparison of Respondent Characteristics

There were no significant differences between the two samples in terms of sex ratios, respondent ages, education level, socio-economic levels, or in the proportions of respondents in health- or education-related professions.

Respondents in the 1980 sample were more likely to have young children, whereas respondents in the 1985 sample tended to have no children or grown-up children.

The median annual family income before taxes was found to be \$22,500.00 for the 1980 sample and \$27,500.00 for the 1985 sample. A Mann-Whitney Test indicated a significant difference in these median values ($p = .0000$). This difference may, however, be accounted for by inflation over the five-year period intervening between the samples.

6.2 Comparison of Respondents' Knowledge of Speech-Language Pathology

There were few significant differences between the two samples in terms of the respondents' knowledge of the profession of Speech-Language Pathology.

Respondents in the 1980 sample were more likely to have been exposed to information about the profession [chi-square (1 d.f.) = 5.74; $p < .05$].

A significantly higher proportion of the 1980 sample believed that they had met a Speech-Language Pathologist [chi-square (1 d.f.) = 8.01; $p < .005$] and that they knew someone who knew a Speech-Language Pathologist [chi-square (1 d.f.) = 20.45; $p < .005$].

6.3 Comparison of Respondents' Knowledge of Communicative Disorders

Responses to questions about communicative disorders were very similar in the two samples. The only significant differences were noted in questions which asked respondents to make decisions about the types of disorders Speech-Language Pathologists treat. Significantly lower proportions of respondents in the 1980 sample believed that Speech-Language Pathologists treat people with cleft palate or "hare lip" [chi-square (1 d.f.) = 7.13; $p < .01$] or mentally retarded people [chi-square (1 d.f.) = 7.03; $p < .01$].

Discussion

1. Respondent Characteristics

The biases present in the sample were not unexpected and may be traced to two sources. The first source of bias is that certain groups of London residents would be better represented in shopping malls than others. Because of greater need to shop or interest in shopping, these might include women and younger persons, especially between age 18 and 44, as both samples reflect. The 1980 sample reflects a significantly higher proportion of parents with larger families and younger children than the 1985 sample. Fortunately, women and parents of several children under the age of 13 are also more likely to be in contact with the population from which the bulk of the Speech-Language Pathologists' caseload is drawn: preschoolers and grade school children.

The second source of bias is that a group of shoppers, certain subgroups would more likely be attracted to a display and willing to answer a questionnaire about Speech-Language Pathology than others. These would logically include individuals with more formal education, especially those in health and education related fields. It might also be expected that this subgroup would have a higher total family income and a higher socio-economic level and that many of these individuals would be university educated women. The responses of the subjects in health and education related fields are of particular interest since these professionals are likely to come into contact with persons needing referral for speech and language services. Persons with grade 10 education or less might be less literate than their peers with more formal education and therefore less willing to fill out a questionnaire.

Finally, respondents with children might be more interested in Speech-Language Pathology than non-parents, while mothers, who are more often primary caretakers than fathers, might be more interested in the subject than fathers. If so, this would tend to intensify the first source of bias. It is probably reasonable to assume that the general population would be no more knowledgeable about Speech-Language Pathology than these subgroups of shoppers who chose to complete the questionnaire.

Thus, although the sample was biased in predictable ways, it was biased in favour of persons whose knowl-

edge of Speech-Language Pathology is of most interest and it is likely that the general population is no more knowledgeable about the subject than the individuals sampled.

It is assumed that the small percentage of the sample of shoppers who lived outside the London city limits had come mainly from areas just outside London, which would be served by London speech and language facilities. If so, it is likely that these individuals would be exposed to similar sources of information about Speech-Language Pathology as London residents and would not differ greatly in their knowledge of the subject.

2. General Knowledge of Speech-Language Pathology

It is noteworthy that more people reported having some information about Speech-Language Pathology in the 1980 sample than in the 1985 sample. However, since both figures are small, it is clear that "Speech-Language Pathology" is not a household word. It is not surprising to find that the group most likely to have been exposed to the profession and/or to a Speech-Language Pathologist are people with at least some university training, from a higher socio-economic level and in a health- or education-related field of work.

With regard to exposure to information about Speech-Language Pathologists, it may be that the books and lectures or talks which respondents had encountered were mainly textbooks, professional journals, university lectures and presentations at professional conferences or workshops. If so, magazines, television and newspapers, in that order, are the three most frequent ways in which the public has been educated about the profession. It seems likely that brochures, open houses, displays and radio could be put to greater use to educate the public. May, being Speech and Hearing Month, would be an ideal time for intensive publicity efforts, but certainly need not be the only time for Speech-Language Pathologists to involve themselves in public education.

It is encouraging to note that the majority of respondents could name at least one place in London where a Speech-Language Pathologist was employed. This suggests that people who knew of the profession would be able to contact a Speech-Language Pathologist to obtain information or request services.

It is interesting to note that at least half of both samples believed a physician's referral was not required to see a Speech-Language Pathologist. There are several reasons why this may be important. Firstly, some individuals might not wish to discuss a suspected communicative disorder with their family physician. Secondly, not all physicians are ideally knowledgeable about symptoms, prognoses, treatment and locally available services for communicative disorders. Finally, some professionals other than physicians may be unaware of the important role they may play in referring persons with suspected communicative disorders for evaluation. Since one-third of the sample believed a physician's referral is required, Speech-Language Pathologists should

continue their efforts to educate physicians about communicative disorders. Clinics which do not require a physician's referral may wish to inform teachers, nurses and other professionals of this fact. Although professional ethics prohibit advertising available services, Speech-Language Pathologists might consider the possibility that potential clients might avoid seeking help out of concern over how to get it.

The fact that nearly two-thirds of the respondents believed four or more years of post-secondary education were required in this field is encouraging evidence that the public recognizes Speech-Language Pathology as a field requiring specialized training.

Job titles were a source of confusion to the respondents. Many were unable to distinguish between "Speech Correctionists" or "Speech Therapists" and "Speech-Language Pathologists". This suggests that many of those who believed they knew a Speech-Language Pathologist may have actually known a Speech Correctionist or a Language Resource teacher.

Many Speech-Language Pathologists object to the use of such a "wordy" and "morbid-sounding" occupational title or prefer to use a more familiar term, such as "Speech Therapist".

Speech Therapist means one who treats speech defects. Technically, the word "speech" excludes non-speech communicative disorders such as the developmental and acquired language disorders which make up such a large part of one's caseload. To some, the word "therapist" implies that treatment is prescribed by another professional, such a physician, who diagnoses the disorder. Certainly it de-emphasizes other important functions of the Speech-Language Pathologist, such as assessment, diagnosis and counselling. Some who have studied speech and language pathology for many years wish to distinguish themselves from individuals with different or less training in communicative disorders, such as language resource teachers, speech correctionists, elocution teachers and so on.

Professional licensing, measures to increase the visibility of the profession and the consistent use of a single job title which clearly indicates that Speech-Language Pathologists diagnose and treat communicative disorders would do much to alleviate these concerns.

Those Speech-Language Pathologists who feel stereotyped as people who correct children's lisps would find support in the responses to the sentence completion question. Frequent references to "children who can't say their sounds properly" suggest that the public does not appreciate what a wide range of communicative handicaps Speech-Language Pathologists treat. This increases the likelihood that individuals with communicative disorders other than articulation or fluency disorders will go unnoticed, unreferred and untreated.

The infrequent mention of "language" in these definitions may further reinforce attempts to include this term in the job title of "Speech-Language Pathologists".

Once again, the respondents most likely to provide complete and more accurate definitions were those who knew a Speech-Language Pathologist or who had a mutual acquaintance with such a person, in higher socioeconomic levels and in professions where they would be more likely to come into contact with a Speech-Language Pathologist.

3. Knowledge of Communicative Disorders

Because relatively few respondents indicated that Speech-Language Pathologists work with infants, clinicians may wish to make it known that they are qualified to treat communicatively handicapped infants. The high proportion of respondents who believed that Speech-Language Pathologists work with grade school children may reflect awareness that these children make up the bulk of speech and language caseloads, or lack of awareness of the differences between Speech-Language Pathologists and the local school boards' speech correctionists and language resource teachers.

Asking respondents to make explicit judgements of a child's need for speech and language evaluation based on written profiles of behaviour does not have demonstrated validity as a measure of ability to recognize symptoms of childhood communicative handicaps. However, the data from this section of the questionnaire suggest that many people would have difficulty distinguishing between normal and abnormal speech and language development. If so, it is particularly important that Speech-Language Pathologists strive to alert health- and education-related professionals to symptoms of possible communicative disorders, conduct effective screening programs and improve public and professional awareness of Speech-Language Pathology.

A very small percentage of both samples were able to make correct judgements on more than a few of the profiles, once again suggesting that the public does not appreciate the scope of the profession and the behavioural symptoms typical of disordered communication. It is disheartening to note that language delay, voice and fluency disorders are not usually recognized.

Similar implications may be drawn when one considers respondents' abilities to decide with which disorders a Speech-Language Pathologist would deal. Of particular interest is the fact that fewer people in the 1985 sample realized that Speech-Language Pathologists treat mentally retarded people or individuals with cleft palates. Some communicative handicaps, such as stuttering, aphasia, or alaryngeal speech appear to be recognized, while others are not. This could be important if problems such as vocal hyperfunction or possible remediation following cleft lip and/or palate surgery escape professional attention.

Like the sentence completion question and the behaviour profile tasks, this section highlights the lack of public awareness of the variety of communicatively handicapped persons whom Speech-Language Pathologists treat. The fact that very limited progress has been

made in public knowledge and awareness in the five-year period between these two samples further reinforces the need for effective screening procedures and continued efforts to improve the visibility of the profession in the public and professional eye.

Summary and Implications

The results of this survey suggest that public awareness of Speech-Language Pathology is less than desirable for the health and growth of the profession, the prevention of communicative disorders and the delivery of services to persons with speech and language impairments.

Although the public in general should be better informed, this investigation has revealed the target population (that is, those least well-informed) to be males, with children, in professions other than health- or education-related fields, with lower education and socioeconomic status.

This investigation also revealed that relatively little is known about a number of important topic areas. In light of this finding, the following topic areas should be stressed:

- What a Speech-Language Pathologist is, the facilities where they can be found, and how to obtain services.
- Variety of disorders assessed and treated by Speech-Language Pathologists, especially the least familiar ones such as those associated with cleft lip and palate, mental retardation, laryngectomy, voice or language delay.
- Groups treated by Speech-Language Pathologists, especially infants. Early identification and prevention programs should be stressed.

Although professional ethics prevent advertising, there is obviously a need for the public to be informed of Speech-Language Pathology and of the services available. The following suggestions are offered for such campaigns:

- Professional organizations and regional groups should intensify public awareness efforts at the local, provincial and national levels. "May is Speech and Hearing Month" campaigns provide an excellent opportunity for such ventures. Campaign activities could include newspaper feature articles, T.V. and radio interviews, open house and mall displays, posters, lapel buttons, films and special lecture presentations.
- The visibility of the profession would improve considerably if all fully qualified persons used the same occupational title.
- Heavily publicized screening programs such as "Back-to-School Screening Week", Well-Baby clinics, and Pre- and Post-Natal group presentations can further the cause of prevention and public awareness.
- Pamphlets about speech and language development should be published and distributed through doctors' offices, preschools and day care centres. Television programs about learning disabilities could be shown by closed circuit in the school system and broadcast by local television channels.

- For the elderly, clinics and seminars could be provided to increase awareness of geriatric communicative disorders such as aphasia or presbycusis. A series of articles about speech and hearing rehabilitation services could be published in a monthly newsletter for senior citizens.
- In-service training workshops to parents, teachers and health professionals provide useful referral and programming information.
- Speech-Language Pathologists could provide informa-

tion about the profession by involving themselves in High School Career Day programs.

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Appendix: Questionnaire

SPEECH-LANGUAGE PATHOLOGY: A STUDY OF PUBLIC AWARENESS

A 1985 study of public awareness of Speech-Language Pathology.

Please answer all of the questions. If you wish to comment on any questions or qualify your answers, please feel free to use the space in the margins. Your comments will be read and taken into account.

Thank you for your help.

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- A** Speech-Language Pathologists concerned with improving their services to the public need to better understand just what people know about these services. Therefore, we would like to begin with a few questions about what the term "Speech-Language Pathologist" means to you. ("Pathologist" means someone who deals with disorders.)
- Q-1** Have you ever seen, heard or read anything about Speech-Language Pathologists? *Circle the number of your answer.*
1. No If you have never seen, heard or read anything about Speech-Language Pathologists, please skip to Q-6 on page 2.
 2. Yes If you have seen, heard or read something about Speech-Language Pathologists, please continue with the questions below.
- Q-2** Have you ever read anything about Speech-Language Pathologists? *Circle the number of your answer.*
1. No
 2. Yes **Where? Circle one or more.**
 - a. Newspaper
 - b. Magazine
 - c. Book
 - d. Brochure
 - e. Other. What? _____
- Q-3** Have you ever seen or heard a program about Speech-Language Pathologists? *Circle the number of your answer.*
1. No
 2. Yes **Where? Circle one or more.**
 - a. Television
 - b. Radio
 - c. Lecture or Talk
 - d. Open House or Display
 - e. Other. What? _____
- Q-4** Have you ever met a Speech-Language Pathologist? *Circle the number of your answer.*
- 1 No 2. Yes How did you meet him/her?

Q-5 Do you know anyone who knows a Speech-Language Pathologist? *Circle number.*

1. No
2. Yes a) Who? (friend, wife, co-worker, etc.)

b) How did he/she/they meet the Speech-Language Pathologist?

Q-6 In London there are about a dozen places where Speech-Language Pathologists provide services to the public. Please give the names of three buildings or institutions in London where you might expect to find a Speech-Language Pathologist working. *Please print.*

1. _____
2. _____
3. _____

Q-7 Do you need a referral from your Family Doctor to see a Speech-Language Pathologist? *Circle the number of your answer.*

1. Yes
2. No

Q-8 Speech-Language Pathologists work with... *Circle one or more.*

1. Infants
2. Pre-schoolers
3. Grade School Children
4. Teenagers
5. Adults

Q-9 How much training would you expect a Speech-Language Pathologist to have beyond high school? *Circle number.*

1. None
2. At least 1 year
3. At least 2 years
4. At least 3 years
5. At least 4 years
6. At least 6 years
7. At least 8 years

Q-10 Are these statements true or false? *Circle number.*

a) A Speech-Language Pathologist may also be called a speech correctionist.

1. True 2. False

b) A Speech-Language Pathologist may also be called a speech therapist.

1. True 2. False

Q-11 Please complete the following sentence as best you can. *Please print.*

A Speech-Language Pathologist is someone who _____

B. Occasionally people must decide whether to seek professional help for certain problems. Our next concern is how easy it is for people to make these decisions. For example, do you think the following children should be tested by a Speech-Language Pathologist? *Circle the number of your answer.*

Q-12 Shannon, age 4, can't say the "s" sound properly, and uses the "th" sound instead. For example, she says "thpoon" for "spoon". Should Shannon be tested by a Speech-Language Pathologist?

1. Yes 2. Probably 3. Not sure 4. Probably not 5. No

Q-13 Raymond, age 8, has a lot of trouble with reading and writing. Raymond does fine talking with his friends and family. The school plans to give him a group of tests to find the cause of the problem. Should Raymond's testing include testing by a Speech-Language Pathologist?

1. Yes 2. Probably 3. Not sure 4. Probably not 5. No

- Q-14 Kerry, age 3, uses about 50 different words and is starting to put words together, like "want cookie". She understands simple questions and can point to pictures and parts of her body when you name them. Should Kerry be tested by a Speech-Language Pathologist?
1. Yes 2. Probably 3. Not sure 4. Probably not 5. No
- Q-15 Jason, age 8, has a husky voice. His mother says he's always yelling. Should Jason be tested by a Speech-Language Pathologist?
1. Yes 2. Probably 3. Not sure 4. Probably not 5. No
- Q-16 Sandy, who is 15 months old, doesn't understand simple phrases like "come here" or "Don't touch". Should Sandy be tested by a Speech-Language Pathologist?
1. Yes 2. Probably 3. Not sure 4. Probably not 5. No
- Q-17 Wayne, age 3, sometimes repeats sounds or words when he's excited, but never seems to notice it. For example, he might say, "L-look at me, Mommy!" Wayne's parents are not concerned about his speech. Should Wayne be tested by a Speech-Language Pathologist?
1. Yes 2. Probably 3. Not sure 4. Probably not 5. No
- Q-18 When Wendy, age 7, tells a story, it's hard to follow what she's talking about. If her mother sends her upstairs for the scissors, Wendy forgets what she wants before she gets there. Wendy seems to do fine talking with her friends and family. Should Wendy be tested by a Speech-Language Pathologist?
1. Yes 2. Probably 3. Not sure 4. Probably not 5. No

C. You have probably guessed by now that Speech-Language Pathologists work with children who have speech problems or who have trouble expressing themselves or understanding speech. But Speech-Language Pathologists work with other types of people too. Therefore, we would like to ask you which of these groups you might expect a Speech-Language Pathologist to work with. *Circle the numbers of your answers.*

- Q-19 People with diseases or injuries of the brain
- Q-20 People with hearing losses
- Q-21 Adults who stutter or stammer
- Q-22 Autistic children
- Q-23 People with pneumonia
- Q-24 Mentally retarded people
- Q-25 People who have their voice box or vocal cords removed
- Q-26 People who have had strokes
- Q-27 Adults who lose their eyesight
- Q-28 People with cleft palate or hare lip
- Q-29 People with strained voices
- Q-30 People with leukemia
- Q-31 Senile people
- Q-32 People with muscle diseases
- Q-33 People with tonsillitis

D. Finally, we would like to ask some questions about yourself to help us interpret the results.

Q-34 Your sex: *Circle the number of your answer.*

1. Male 2. Female

Q-35 What is your present age? *Circle number.*

- | | |
|----------------|---------------------|
| 1. 18-19 years | 5. 45-54 years |
| 2. 20-24 years | 6. 55-64 years |
| 3. 25-34 years | 7. 65-69 years |
| 4. 35-44 years | 8. 70 years or over |

Q-36 Do you have any children? *Circle number.*

1. No 2. Yes

If yes, please indicate the number of children you have in each age group. If none, write "0".

Number of children

- _____ under 2 years of age
_____ 2 — 4 years
_____ 5 — 9 years
_____ 10 — 12 years
_____ 13 — 14 years
_____ 15 — 19 years
_____ 20 years or over

Q-37 Which is the highest level of education you have completed? *Circle the number of your answer.*

1. Grade 4 or less
2. Grade 5, 6, 7, or 8
3. Grade 9 or 10
4. Grade 11, 12, or 13
5. Some non-university education or training beyond high school, etc., community college, nursing school
6. Some university
7. Bachelor's degree/Specify major
8. Graduate degree/Specify degree and major

Please describe your usual occupation. If retired, describe the usual occupation before retirement.

Title _____

Type of work _____

Q-39 Are you the principal wage earner of your household? *Circle number.*

1. Yes 2. No

If no, please describe the usual occupation of the principal wage earner in your household. If retired, describe the usual occupation before retirement.

Title _____

Type of work _____

Q-40 Which of the following categories best describes your total family income from all sources before taxes during 1984?

- | | |
|-------------------------|-------------------------|
| 1. \$5,000 or less | 6. \$25,001 to \$30,000 |
| 2. \$5,001 to \$10,000 | 7. \$30,001 to \$35,000 |
| 3. \$10,001 to \$15,000 | 8. \$35,001 to \$40,000 |
| 4. \$15,001 to \$20,000 | 9. \$40,001 to \$45,000 |
| 5. \$20,001 to \$25,000 | 10. \$45,001 or over |

Q-41 Do you live within London city limits? *Circle number.*

1. No 2. Yes

If yes, please indicate length of time:

- _____ for less than 6 months
_____ for less than 1 year
_____ between 1 and 2 years
_____ over 2 years.

Is there anything else you would like to tell us about Speech-Language Pathology? If so, please use this space for that purpose.

Also, we would appreciate any comments you care to make that may help us in future efforts to understand what London residents know about Speech-Language Pathology.

Your contribution to this effort is very greatly appreciated. If you are interested in learning more about Speech-Language Pathology and services available in London, please ask for our free brochures.