Opinions on Stuttering and its Treatment: A Follow-up Survey and Cross-cultural Comparison

Avis sur le bégaiement et son traitement : enquête de suivi et comparaison interculturelle

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Abstract

A 20 item questionnaire dealing with fluency disorders was mailed to 981 Canadian Association of Speech-Language Pathologists and Audiologists (CASLPA) speech-language pathologists. The survey was designed to track shifts in opinions on a number of issues from a previously reported study of CASLPA members, and also to compare to the responses of two similar studies conducted in the United States. The response rate was 52.1%. Results of the survey indicated that a lower percentage of the respondents are treating fluency disorders than had been reported in 1990. Several interpretations of this finding are offered including the trend toward specialization. There has been an increase in the numbers of clinicians working with pre-school children while the numbers working with adolescents and adults have decreased. There have been no discernible shifts in opinions regarding academic and clinical preparation for fluency disorders since 1990. More than three quarters of the respondents were of the opinion that recently established self-help groups represent an important adjunct to therapy. Several interesting differences between Canadian and American attitudes toward fluency disorders and their treatment were found including a greater emphasis placed on the psychological aspects of fluency disorders by clinicians practicing in the United States. Implications for further research are offered.

Abrégé

Une enquête comportant 20 questions sur les troubles de fluidité verbale a été envoyée à 981 orthophonistes membres de l'Association canadienne des orthophonistes et audiologistes (ACOA). Cette enquête visait à vérifier les changements d'opinion sur un certain nombre de points que les membres de l'ACOA avaient déjà soulevés précédemment dans un autre rapport. Elle cherchait aussi à comparer les réponses avec deux autres études semblables menées aux États-Unis. Le taux de réponse s'est élevé à 52,1 %. Les résultats de l'enquête indiquent qu'un pourcentage plus faible de répondants qu'en 1990 traite les troubles de fluidité. Plusieurs explications possibles ont été avancées, y compris la tendance à la spécialisation. Le nombre de cliniciens qui travaillent avec des enfants d'âge préscolaire a augmenté, tandis que le nombre de ceux qui traitent les adolescents et les adultes a diminué. Cette enquête n'a fait ressortir aucun changement perceptible concernant la formation universitaire et clinique nécessaire pour traiter ce genre de trouble. Plus des trois quarts des répondants étaient d'avis que les nouveaux groupes d'effort autonome constituaient un important complément à la thérapie. Plusieurs écarts intéressants entre les attitudes canadiennes et américaines vis-à-vis des troubles de fluidité et de leur traitement ont été observés, y compris l'importance accrue qu'accordent les cliniciens américains aux aspects psychologiques du traitement des troubles de fluidité. On y trouve aussi des pistes pour approfondir la recherche dans ce domaine.

Key Words: fluency disorders, stuttering, attitudes, opinions, speech-language pathologists, treatment

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Introduction

The disorder of stuttering has puzzled researchers and clinicians for centuries, and this has often been reflected in the attitudes of those involved in its treatment. In fact, St. Louis and Durrenberger (1993) reported that the practice of stuttering treatment was ranked as one of the least enjoyable activities carried out by clinicians.

There have been several descriptive research studies investigating the attitudes and opinions regarding people who stutter as well as perceptions of treatment effectiveness. These studies have typically surveyed speech-language pathologists (Cooper & Cooper, 1985; Cooper & Rustin, 1985; Crichton-Smith, Wright, & Stackhouse, 2003; Lass, Ruscello, Pannbacker, Schmitt, & Everly-Myers, 1989; Woods & Williams, 1971; Yairi & Williams, 1970), people who stutter (Haynes & Oratio, 1978; Watson, 1995) and the public (St. Louis & Lass, 1981; Woods & Williams, 1976; Yeakle, & Cooper, 1986). Furthermore, such surveys have been carried out in several different countries, including Canada (Kroll & O'Keefe, 1990), the United States (Cooper & Cooper, 1996) and Great Britain (Crichton-Smith, Wright, & Stackhouse, 2003). Results of these studies indicate that specific beliefs concerning the disorder of stuttering may exist among the various groups and cultures studied. These perceptions pertain to the nature, etiology and treatment of stuttering as well as to opinions regarding the individual who stutters.

Much of the above research was conducted in the mid 1980s and some of these surveys have since been replicated in an attempt to investigate changing attitudes and practices regarding stuttering and stuttering treatment. Replication studies have been carried out in both the United States (Cooper & Cooper, 1996) and Great Britain (Crichton-Smith et al., 2003). Cooper and Cooper (1985, 1996) have tracked changes in clinicians' attitudes toward stuttering, using the Clinician Attitudes Toward Stuttering Inventory (CATS) (Cooper, 1975) over an 18 year period from 1973 to 1991. Some of these changes included a tendency to reject the notion of the parental causality of stuttering and increased support for early direct intervention. However, overall the attitudes of clinicians remained relatively stable over the study period.

In an attempt to provide state of the art Canadian data regarding speech-language pathologists' opinions on stuttering therapy, Kroll and O'Keefe (1990) surveyed 620 members of the Canadian Association of Speech-Language Pathologists and Audiologists (CASLPA). The authors identified very few specialized treatment programs for stuttering in Canada and speculated that there existed, within the professional community, a reluctance to practice speech therapy with individuals who stutter due to inadequate academic and/or clinical preparation. Results of their study demonstrated that, while a large majority of their respondents reported carrying out therapy with individuals who stutter at least occasionally, many reported low levels of enjoyment and low self-ratings of competence when treating this population. Responses concerning therapy effectiveness indicated that a majority of respondents felt that treatment for stuttering was, however, at least somewhat effective. The results of the study were interpreted in relation to academic and clinical training of speech-language pathology students.

The purpose of the current study was to investigate whether the attitudes and opinions of speech-language pathologists in Canada regarding stuttering and its treatment have changed since the initial Kroll and O'Keefe study. A second purpose to this investigation was to conduct a cross-cultural comparison with data obtained from both clinicians in Canada and the United States. Specifically, the investigation sought to compare and contrast survey responses for specific items taken from the CATS Inventory (Cooper, 1975) as rated by practicing speech-language pathologists in the United States and in Canada.

Method

Participants

Participants were selected from the list of the speech-language pathology members of CASLPA. The population comprised 2,713 individuals whose language of correspondence was English and 150 members whose language was French. From this list 948 English speaking and 52 French speaking members were randomly selected for a sample of 1,000, which represented 34.9% of the total population.

Survey Instrument

A 20-item questionnaire was designed that included 12 questions from the survey instrument utilized by Kroll and O'Keefe (1990) and six questions from the Cooper and Cooper (1985; 1996) surveys. Two additional questions were developed to address recent topics (self-help and the physiological basis of fluency disorders). The questionnaire and cover letter were prepared in both English and French versions. A copy of the English language questionnaire is shown in Appendix A. Given that the present questionnaire was in large part a replication of past survey research, permission to use the items from the previously published surveys was obtained in writing from the original authors. Face validity of the current instrument was determined by a pre-examination by two speech-language pathologists holding certificates of registration in Ontario. The research methodology for this study was reviewed and approved by the York University human subjects research ethics review committee.

Procedure

A copy of the survey was mailed, along with a stamped, return addressed envelope, to 948 English speaking and 52 French speaking speech-language pathologists in Canada between May and July 2003.

Data Analysis

The survey data for the 20 questions were coded and examined using the Statistical Package for the Social Sciences version 11.0 (SPSS Inc., Chicago, IL) software. The data were then compared to those of Cooper and Cooper (1985; 1996) and Kroll and O'Keefe (1990).

Results

Of the 1,000 questionnaires mailed, 19 were returned due to incorrect addresses. Of the remaining 981, 52.1% (511) were completed and returned within three months. The response rate was 46.0% for the French language survey and 52.4% for the English language survey.

Table 1 displays responses to the three items pertaining to caseload types and referral practices in the two studies. The data indicate that while more than 62% of the clinicians treated fluency disorders at least sometimes in 1990, only 48% reported practising in this area in 2003. Further inspection of the data in Table 1 indicates an increase in the percentage of clinicians who treated pre-schoolers in 2003 with a subsequent decrease in those treating other age groups. The referral practices portion of Table 1 indicates that the number of clinicians referring to specialized centres increased to 29.4% in 2003 from 16.8% in 1990. The data reveal a corresponding decrease in the number of 2003 clinicians who independently assessed and treated individuals with fluency disorders.

Table 2 displays responses to the five items pertaining to academic and clinical preparation. Respondents in both 1990 and 2003 provided essentially the same ratings, indicating that greater than 60% felt that their academic preparation in this area was at least good or better. Data regarding the amount and quality of student clinical experience with fluency disorders are essentially unchanged from those obtained in 1990. Less than half of the respondents (45.8%) rated the amount of their student experience as good or better. Moreover, only 56.3% of the respondents reported that the quality of this experience was good or better.

In 2003, almost 30% of the respondents reported that their knowledge of fluency disorders had either decreased or stayed the same since starting to practice and greater than 50% reported rarely or never participating in formal continuing education activities in this area. This compares to slightly over 20% for the knowledge question and about 43% for continuing education in 1990.

Table 3 summarizes judgements of competence and sophistication levels with reference to treatment of fluency disorders. Sixty-four percent of the respondents rated their level of competence in treating fluency disorders as at least adequate in 2003, compared to 72% in 1990. In both the 1990 and the 2003 studies, the vast majority of respondents (54.1% and 54.2%, respectively) reported typically employing two or three therapy approaches. The data further indicate that fewer respondents reported being able to employ more than three approaches to therapy in 2003 compared to the earlier 1990 study.

Table 4 displays reports of enjoyment levels when treating stuttering. In general, the data appear to show no differences between the 1990 and 2003 studies with most ratings showing low or average levels, except that a greater percentage of the respondents in 2003 reported not treating fluency disorders at all.

Table 1

Caseload and referral practices (in percentages)

	I treat fluency disorders ...				
	always	often	sometimes	rarely	never
1990	5.2	19.0	39.2	22.8	13.8
2003	5.0	11.2	31.8	34.0	18.0
	My fluency disorders caseload includes primarily ...				
	pre-school children	school-aged children	adolescents/ adults	all ages	don't treat
1990	17.6	40.2	14.5	12.3	15.4
2003	26.9	36.3	9.9	6.1	20.8
	When presented with a person with a fluency disorder I most often will . ..				
	assess or treat myself	inside referral	refer to special clinic	refer to non-S-LP	
1990	67.2	14.1	16.8	1.8	
2003	55.2	15.0	29.4	0.4	

Table 2

Academic and clnical preparation (in percentages)

	My academic preparation in fluency disorders was ...				
	excellent	very good	good	fair	poor
1990	11.2	22.2	31.8	26.4	8.4
2003	8.2	22.2	31.6	26.8	9.2
	The amount of my student clinical experience with fluency disorders was ...				
	excellent	very good	good	fair	poor
1990	5.8	19.6	27.6	41.6	5.4
2003	4.8	17.9	23.1	46.9	7.4
	The quality of my student clinical experience with fluency disorders was ...				
	excellent	very good	good	fair	poor
1990	10.5	21.1	28.1	26.5	13.8
2003	11.0	19.9	25.4	27.8	15.9
	Since practicing, my knowledge of fluency disorders has ...				
	increased substantially	increased somewhat	increased a little	stayed the same	decreased
1990	29.3	23.8	26.5	13.6	6.8
2003	22.9	25.5	21.9	17.0	12.8
	I have engaged in formal continuing education re: fluency disorders ...				
	consistently	often	occasionally	rarely	never
1990	4.2	13.4	40.5	24.4	17.4
2003	3.0	10.3	34.8	23.7	28.2

Table 3

Competence and sophistication (in percentage)

	My level of competence in treating fluency disorders is				
	high	better than average	adequate	barely adequate	low
1990	8.0	18.4	45.9	21.4	6.2
2003	4.6	16.8	43.0	29.0	6.6
	I am capable of employing the following number of treatment approaches ...				
	more than 5	4 or 5	2 or 3	1	none
1990	7.6	29.9	54.1	6.2	2.2
2003	4.8	24.4	54.2	10.1	6.5

Table 4

Enjoyment level (in percentages)

	My level of enjoyment in treating fluency disorders is ...				
	highest	high	average	low	don't treat
1990	4.0	22.1	37.0	24.1	12.7
2003	3.2	19.7	35.5	25.3	16.3

Table 5 shows the judgements of respondents with respect to how they viewed the effectiveness of therapy for persons with fluency disorders. The views appear to have remained stable, with 83.3% of respondents in 1990 stated that therapy is "very" or "somewhat effective" and in 2003, 83.9% expressed the same view.

Table 5

Effectiveness of speech therapy for stuttering (in percentages)

	Speech therapy for fluency disorders is ...				
	very effective	somewhat effective	of limited effectiveness	completely ineffective	can't judge
1990	27.6	55.7	11.7	0.0	5.0
2003	21.6	62.3	10.6	0.0	5.6

Table 6 compares the findings of Cooper and Cooper (1985, 1996) in the United States to ours with regard to perceptions held by speech-language pathologists of persons with fluency disorders. It should be noted that Cooper and Cooper used the term "stutterers" in their survey, while we have employed the term, "people with fluency disorders." The last question summarized in the table is one that had not been asked previously.

Slightly more Canadian speech-language pathologists were undecided about whether people with fluency disorders make good clinicians when compared with their counterparts in the United States. Overall, however, there is little difference on this scale between the two groups.

More significant differences were found on views about whether people with fluency disorders have psychological problems. Only 17.4% of Canadian clinicians agreed with the statement that most people with fluency disorders have psychological problems while 35.7% of those in the United States did. At the same time, 64% of Canadian clinicians disagreed with the view that most people with fluency disorders have psychological problems, while only 44% of their counterparts in the United States disagreed with this statement. A similar difference is found with regard to whether persons with fluency disorders have common characteristics. Only 27.8% of Canadians clinicians perceived common characteristics, while twice as many (57.8%) clinicians in the United States did.

In light of recent research findings supporting the physiological nature of fluency disorders, we asked respondents for their views on this subject (a question not asked by Kroll and O'Keefe or Cooper and Cooper). Almost 60% (59.7%) agreed with the existence of an underlying physiological impairment, while only 14.7% disagreed.

Table 7 displays the perceptions of clinicians in Canada and the United States with respect to the treatment of fluency disorders. Again, there are considerable differences in that 21.4% of Canadians believed that clinicians are adept in treatment, but only 12.6% of those in the United States stated a similar view. Far more Canadians (31.5%) were undecided about the adeptness compared to only 11.9% of those in the United States. A similar pattern is found in perceptions of the ability of clinicians to modify self-concepts of clients. In Canada, only 32.6% agreed that clinicians are effective in doing so, but 53.3% of their colleagues in the United States believed this was the case. Nearly twice as many Canadians (44.6%) were undecided compared to only 24.4% in the United States.

Finally, table 8 summarizes our findings on attitudes toward self-help groups, a question not previously asked by Kroll and O'Keefe (1990), or Cooper and Cooper (1985, 1996). More than three quarters (77.6%) of respondents agreed that self-help groups are an important component of therapy. No respondent strongly disagreed, while only 0.8% moderately disagreed. In asking about perceptions of the reactions toward stuttering behaviour, 74.3% of Canadian clinicians agreed that the public reacts more negatively to stuttering behaviour than to other aberrant speech behaviour. This contrasts with 86.7% of the United States clinicians who held this view.

Discussion

This study sent surveys to 981 CASLPA speech-language pathologists. A total of 511 questionnaires were returned within a three month period, indicating a high level of interest with these issues. It should be noted that the study represents the views of speech-language pathologists who are members of CASLPA, and, as such, generalizing the results to all Canadian practitioners should be done with caution.

One of the main shifts noted when comparing the data obtained from the 1990 and the 2003 studies relates to the percentage of clinicians working with people who stutter. Less than half of the respondents reported working in this area at least sometimes, a downward shift from the 62% active in this area in 1990. We interpret this finding to

Table 6

Perceptions of people who stutter (in percentages)

People with fluency disorders generally make good speech-language clinicians

	strongly agree	moderately agree	undecided	moderately disagree	strongly disagree
1985	9.5	24.3	49.4	12.2	4.7
1996	5.3	26.0	53.6	11.9	3.1
2003	7.5	21.5	62.5	5.9	2.6

Chances are that most people with fluency disorders have psychological problems ...

	strongly agree	moderately agree	undecided	moderately disagree	strongly disagree
1985	5.4	36.5	21.2	27.2	9.8
1996	3.6	32.1	20.4	31.3	12.7
2003	3.0	14.4	18.6	35.8	28.2

There are some personality traits characteristic of people with fluency disorders ...

	strongly agree	moderately agree	undecided	moderately disagree	strongly disagree
1985	7.3	47.5	22.4	16.2	6.6
1996	7.4	50.4	23.8	13.7	4.7
2003	4.6	23.2	30.5	26.5	15.2

Chances are that most people with fluency disorders have, to some extent, an underlying physiological impairment

	strongly agree	moderately agree	undecided	moderately disagree	strongly disagree
2003	20.1	39.6	25.6	11.7	3.0

Table 7

Perceptions of clinicians (in percentages)

Most speech clinicians are adept in treating fluency disorders ...

	strongly agree	moderately agree	undecided	moderately disagree	strongly disagree
1985	1.2	9.3	12.1	49.6	27.6
1996	1.2	11.4	11.9	49.3	26.2
2003	1.2	20.2	31.5	38.3	8.8

Clinicians generally are effective in modifying the self-concepts of people who have fluency disorders

	strongly agree	moderately agree	undecided	moderately disagree	strongly disagree
1985	3.9	47.4	20.9	24.0	3.8
1996	4.0	49.3	24.4	20.3	2.0
2003	3.2	29.4	44.6	19.2	3.6

suggest that there is a greater emphasis currently placed on specialization. Clinicians are focussing their efforts on specific disorder areas as agencies are hiring fewer generalists who would be expected to assume all inclusive caseloads. Further support for this trend is found when observing the shift in referral patterns from 1990 to 2003. Whereas less than 17% of the clinicians reported referring fluency clients to specialized clinics in 1990, almost 30% reported making these referrals in 2003. That more clinicians are referring individuals who stutter to other colleagues or institutions may also reflect that fact that many practitioners do not feel comfortable working with stuttering or experience little joy in doing so. In fact, inspection of Table 4 reveals that only 23% of respondents indicated a high level of enjoyment working in this area. Higher referral rates may also reflect decreases in services to outpatient clinics (a trend that developed significantly in the 1990s). Another reason for the higher referral rates may be the growing awareness of the various specialized programs in which children and adults who stutter can be more intensively and effectively treated.

It is also to be noted that there has been a sizeable increase in the numbers of clinicians working with pre-school children. We interpret this finding as possibly reflecting a growing trend to treat early stuttering directly rather than indirectly through environmental management. Moreover, positive treatment outcomes from programs such as Lidcombe (Harrison & Onslow, 1999) may have encouraged more clinicians to provide services for this age group. Services for adolescents and adults continue to be far less widespread. In fact only 16% of those surveyed indicated treating all age groups, including adolescents and adults. This compares to over 26% reporting similar caseloads in 1990. It is likely that there are still minimal services provided for high school students, a situation that has not shifted significantly since first identified by Kroll and O'Keefe in 1990.

It is disconcerting to note that the data regarding academic and clinical preparation reveal no discernible positive shifts over the last 13 years. In fact, less than one quarter of the respondents rated the amount of their clinical experience with fluency disorders as either very good or excellent. Only one third of the respondents judged the quality of their

Table 8

Perceptions of self-help groups and the public (in percentages)

Self-help groups are an important component of therapy for fluency disorders...

	strongly agree	moderately agree	undecided	moderately disagree	strongly disagree
2003	39.9	37.7	21.6	0.8	0.0

The public tends to react more negatively to stuttering behavior than to other aberrant speech behaviour ...

	strongly agree	moderately agree	undecided	moderately disagree	strongly disagree
1985	31.1	53.6	5.0	8.5	1.9
1996	31.7	55.0	4.7	6.7	1.9
2003	22.0	52.3	12.0	11.6	2.2

student clinical experience as either very good or excellent. The 2003 data are almost identical to those reported in 1990. Similar results were obtained with reference to judgements of academic preparation, as only about one third of the respondents judged their course work in fluency disorders as either very good or excellent. It appears then, that there has been no discernable progress made with reference to ratings of academic and clinical preparation of students despite positive advances in research and treatment. One possible explanation may be that clinical coordinators of graduate programs find it increasingly difficult to provide students with sufficient numbers of high quality placements in fluency due to the identified lack of services. Another issue may be that fluency disorders courses may not be providing the appropriate numbers of hours or placement within the graduate school program, resulting in students not being given sufficient opportunities to develop keen interests in the area. This problem may be further compounded by the additional areas of study that have been recently introduced to many speech-language pathology programs, including dysphagia, augmentative and alternative communication (AAC), autistic spectrum disorders and others.

An important and novel aspect of our research was to compare the views of our sample to those of speech-language pathologists in the United States. In doing so, we were particularly interested in changes in views over time and across the two countries. The differences in attitudes between Canadian and American clinicians that we found may be accounted for in two ways. First, the observed differences may be primarily a function of the different times at which the research studies were conducted. The second explanation is that there are possibly longstanding differences in attitudes and perceptions between Canadian clinicians and those in the United States, with Canadians holding views that place less weight on psychological aspects of fluency disorders and holding generally more "undecided" views.

Although our research design does not allow us to exclude either of these explanations, it seems likely, given the relative stability of attitudes found by Cooper and Cooper over two decades, that there are notable differences between clinicians in Canada and the United States. These could be attributed to the fact that a small number of training programs in speech-language pathology in Canada ensures a more consistent and similar approach to theoretical and treatment models for fluency disorders. In contrast, the over 200 training programs in the United States result in a greater variety of approaches and perspectives. Our study points to the need for further research in tracking not only changes in the attitudes of Canadian clinicians over time, but also tracking differences between them and clinicians in other countries.

Our question concerning a physiological basis of stuttering (to which 60% of the respondents agreed that there is an underlying physiological impairment) suggests that Canadian clinicians are aware of the recent research that points to a physiological root for stuttering and other fluency disorders (Ludlow, 1999). Nonetheless, the perception that the effectiveness of speech therapy has remained unaltered in the past decade and a half suggests that there has been a consolidation and refinement of therapy and programs rather than dramatic shifts in approaches to treatment.

Although there are no comparative data, more than three quarters of respondents strongly or moderately agree that self-help groups are an important component of therapy. This suggests an attitude that may not have existed in past decades. Our data reveal that three quarters of the respondents believe that the public reacts more negatively to stuttering behaviour. The Canadian results (as well as those from the United States where 86.7% agree that the public reacts more negatively) indicate that persons who stutter may face significant stereotyping and seem to reflect the reports of stigmatization and isolation that clinicians often hear from clients (Bebout & Arthur, 1992; Leahy, 1994).

In conclusion, our findings show a relative stability of Canadian clinician attitudes over the past decade and a half especially concerning academic and clinical preparation. At the same time, our findings regarding caseload and referral practices lend themselves to a number of interpretations including a trend toward greater specialization of clinicians. Self-help groups, established largely since 1990, appear to be a welcome addition and are highly regarded by clinicians. We also identify a divergence on several measures between clinicians in Canada and the United States, although the interpretation of the differences remains uncertain. Our survey did not allow for an in-depth exploration of the stability, change and differences that we found, thus pointing to the need for further research in these areas. Studies of clinician attitudes towards treating other types of communication disorders will help to place the issues raised in this article into a broader perspective.

Acknowledgements

We wish to thank the members of the Canadian Association of Speech-Language Pathologists and Audiologists for their assistance in completing and returning the surveys. We thank Lieve De Nil for translating the survey instrument and Daniel Buchanan for designing the data coding protocol. We also thank Laura Bleszensky, Maqueita Cameron, Lisa Debow, Aravind Namasivayam and Gaille Snoulten for their administrative and data entry assistance. Finally, we express our thanks to Dr. Bernard M. O'Keefe for providing insightful comments on an earlier version of this manuscript.

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References

Bebout, L., & Arthur B. (1992). Cross-cultural attitudes toward speech disorders. *Journal of Speech & Hearing Research, 35*(1), 45-52.

Cooper, E.B. (1975) Clinician attitudes toward stuttering: A study of bigotry? Paper presented at the convention of the American Speech-Language-Hearing Association. Washington, D.C.

Cooper, E. B., & Cooper, C. S. (1985). Clinician attitudes toward stuttering: A decade of change (1973-1983). *Journal of Fluency Disorders, 10*, 19-33.

Cooper, E. B., & Cooper, C. S. (1996). Clinician attitudes towards stuttering: Two decades of change. *Journal of Fluency Disorders, 21*, 119-135.

Cooper, E. B., & Rustin, L. (1985). Clinician attitudes toward stuttering in the United States and Great Britain: A cross-cultural study. *Journal of Fluency Disorders, 10*, 1-17.

Crichton-Smith, I., Wright, J., & Stackhouse, J. (2003). Attitudes of speech and language therapists towards stammering: 1985 and 2000. *International Journal of Language & Communication Disorders, 38*(3), 213-34.

Haynes, W. O., & Oratio, A. R. (1978). A study of clients' perceptions of therapeutic effectiveness. *Journal of Speech & Hearing Disorders, 43*(1), 21-3.

Harrison, E., & Onslow, M. (1999). Early Intervention for Stuttering. The Lidcombe Program. In R. F. Curlee (Ed.), *Stuttering and Related Disorders of Fluency* (pp. 65-79). New York: Thieme Medical Publishers Inc.

Kroll, R. M., & O'Keefe, B. M. (1990). Opinions on Stuttering Therapy: A Survey of CASLPA Members. *Journal of Speech-Language Pathology & Audiology, 14*(2), 59-63

Lass, N., Ruscello, D., Pannbacker, M., Schmitt, J., & Everly-Myers, D. (1989). Speech-language pathologists' perceptions of child and adult female and male stutters. *Journal of Fluency Disorders, 14*, 127-134.

Leahy, M. M. (1994). Attempting to ameliorate student therapists' negative stereotype of the stutterer. *European Journal of Disorders of Communication, 29*(1), 39-49.

Ludlow, C. L. (1999). A conceptual framework for investigating the neurobiology of stuttering. In N. B. Ratner and E. C. Healey (Eds.), *Stuttering Research And Practice: Bridging the Gap* (pp. 63-84). New Jersey: Lawrence Erlbaum & Associates.

St Louis, K. O., & Durrenberger, C. H. (1993). What communication disorders do experienced clinicians prefer to manage? *Asha, 23-31.*

St. Louis, K. O., & Lass, N. J. (1981). A survey of communicative disorders students' attitudes toward stuttering. *Journal of Fluency Disorders, 6*, 49-79.

Watson, J. B. (1995). Exploring the attitudes of adults who stutter. *Journal of Communication Disorders, 28*(2), 143-64.

Woods, C. L., & Williams, D. E. (1971). Speech clinician's conceptions of boys and men who stutter. *Journal of Speech and Hearing Disorders, 36*, 225-235.

Woods, C. L., & Williams, D. E. (1976). Traits attributed to stuttering and normally fluent males. *Journal of Speech and Hearing Research, 19*, 267-278.

Yairi, E., & Williams, D. E. (1970). Speech clinicians' stereotypes of elementary school boys who stutter. *Journal of Communication Disorders, 3*, 161-170.

Yeakle, M. K., & Cooper, E. B. (1986). Teacher perceptions of stuttering. *Journal of Fluency Disorders, 11*, 345-359.

Received: *May 3, 2004*

Accepted: *October 28, 2004*

APPENDIX A

Fluency Disorders Questionnaire

Please answer each question with the single response which best reflects your beliefs and experiences.

Since the data collected will be treated via computer analysis, please provide only one answer per question and save any additional comments until the end.

Thank you for your help.

1. I treat fluency disorders: [ ] always [ ] often [ ] sometimes [ ] rarely [ ] never		**7.** Since I have been practicing, my knowledge of fluency disorders has: [ ] increased substantially [ ] increased somewhat [ ] increased a little [ ] stayed about the same [ ] decreased
2. My fluency disorders caseload inlcudes primarily: [ ] preschool children [ ] school-aged children [ ] adolescents/adults [ ] all ages [ ] I don't treat fluency disorders		**8.** I have engaged in formal continuing education (e.g., workshops, courses, mini-seminars) re: fluency disorders: [ ] consistently [ ] often [ ] occasionally [ ] rarely [ ] never
3. I would judge my level of competence in treating fluency disorders as being: [ ] high [ ] better than adequate [ ] adequate [ ] barely adequate [ ] low		**9**. In my treatment of fluency disorders I am capable of employing approximately the following number of treatment approaches (e.g., fluency shaping, stuttering modification, masker, acceptance of stuttering, relaxation, desensitization, etc.): [ ] more than 5 [ ] 4 or 5 [ ] 2 or 3 [ ] 1 [ ] none
4. I feel that my academic preparation (course work) in fluency disorders was: [ ] excellent [ ] very good [ ] good [ ] fair [ ] poor		**10**. When I treat fluency disorders, my enjoyment level can be described as: [ ] highest (relative to other disorders) [ ] high [ ] average [ ] low [ ] I don't treat fluency disorders
5. The amount of my student clinical experience with fluency disorders was: [ ] extensive [ ] greater than average [ ] adequate [ ] limited [ ] nil		**11.** When presented with a person with a fluency disorder, I most often will: [ ] assess and/or treat the individual myself [ ] refer to another clinician within my own institution [ ] refer to a clinic known to specialize in fluency disorders [ ] refer to a professional other than a speech-language pathologist
6. I feel that the quality of my student clinical experience with fluency disorders was: [ ] excellent [ ] very good [ ] good [ ] fair [ ] poor		**12**. Most speech clinicians are adept in treating fluency disorders: [ ] strongly agree [ ] moderately agree [ ] undecided [ ] moderately disagree [ ] strongly disagree

APPENDIX A

Fluency Disorders Questionnaire (continued)

13. Clinicians generally are effective in modifying the self-concepts of people who have fluency disorders: [ ] strongly agree [ ] moderately agree [ ] undecided [ ] moderately disagree [ ] strongly disagree		**17**. Chances are that most people with fluency disorders have, to some extent, an underlying physiological impairment: [ ] strongly agree [ ] moderately agree [ ] undecided [ ] moderately disagree [ ] strongly disagree
14. In general, I believe that speech therapy for fluency disorders is: [ ] very effective [ ] somewhat effective [ ] of limited effectiveness [ ] completely ineffective [ ] I am unable to judge		**18**. Chances are that most people with fluency disorders have psychological problems: [ ] strongly agree [ ] moderately agree [ ] undecided [ ] moderately disagree [ ] strongly disagree
15. People with fluency disorders generally make good speech-language clinicians: [ ] strongly agree [ ] moderately agree [ ] undecided [ ] moderately disagree [ ] strongly disagree		**19**. There are some personality traits characteristic of people with fluency disorders: [ ] strongly agree [ ] moderately agree [ ] undecided [ ] moderately disagree [ ] strongly disagree
16. Self-help groups, such as the Canadian Association of People who Stutter, are an important component of therapy for fluency disorders: [ ] strongly agree [ ] moderately agree [ ] undecided [ ] moderately disagree [ ] strongly disagree		**20**. The public tends to react more negatively to stuttering behavior than to other aberrant speech behavior: [ ] strongly agree [ ] moderately agree [ ] undecided [ ] moderately disagree [ ] strongly disagree

Please add any comments you may have about fluency disorders.

Please indicate, on a separate piece of paper, your address (or a business card) if you would like to be mailed a copy of the results of this study.

Thank you.