# Chapter

# professional Awareness of Cluttering

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# Reference

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# Professional Awareness of Cluttering

Kenneth O. St. Louis and Lena Rustin

### Introduction

As noted in Chapter 1, speech-language pathologists are often reluctant to treat clutterers. The purpose of this chapter is to provide insight into the reasons why cluttering causes so much anxiety and uncertainty among clinicians and how treatment of this disorder might be improved. Research in this area is very limited; however, a recent study in the USA by St. Louis and Durrenberger (1991) looked at the preferences clinicians develop for treating some disorders rather than others and their reasons. None of the clinicians selected clutterers as one of their three favorite disorders. Of those who listed it among their three least favorite, the most common reasons were a dearth of professional experience and limited success in treating the disorder. This study suggests that Daly's (1986) reference to cluttering as "the orphan in the family of speech and language pathology" (p. 155) has some validity. A survey of clinicians' attitudes towards stutterers in USA and UK (Cooper & Rustin 1985) also found that both British and American clinicians are unsure of their ability to treat stuttering. Since it is widely acknowledged that the problems of stuttering and cluttering are related and often occur simultaneously (Weiss 1964; Van Riper 1971, 1982), this investigation suggests the value of similar comparisons for cluttering. This current chapter provides a summary of two investigations which sought to assess clinician's awareness, knowledge, experience, and training in cluttering in the two countries.

# Clinician Surveys

Two surveys have been completed; one of them is reported as part of a study in the USA by St. Louis and Hinzman (1986) and the other by the authors of this chapter in the UK, carried out in 1989. The results of these two questionnaire studies comprise most of the available data on clinicians' awareness of cluttering.

The methodology of the two surveys was purposely similar so that results for the two countries would be comparable. St. Louis and Hinzman (1986) analyzed questionnaires from 156 speech-language pathologists, 81% employed in public schools in West Virginia and 19% in other settings such as hospitals, clinics, or universities throughout the USA. A few individuals in the latter group were well-known experts in fluency disorders. After reading a description of cluttering, respondents were asked questions regarding their impressions and experiences regarding the disorder.

The UK sample consisted of 130 practicing speech therapists who returned questionnaires given or mailed to them by the second author. The questionnaire had undergone a number of modifications to gain certain new information as well as to better accommodate British terminology and speech therapy delivery systems. For example, a number of items on a list of symptoms were deleted and others added to take into account other symptoms reported in the literature.

The following summary of symptoms, distilled from the literature, was included so that all clinicians were provided with the same description from which to respond. No doubt, this procedure influenced the results, particularly in perceptions of symptomatology. The purpose was not to validate a definition but to insure that responses were reasonably comparable.

Their speech is noticeable because it usually sounds "cluttered" as though they are talking without a clear idea of what they want to say. Their conversation is hard to follow because they seem to talk too fast, or in a jerky fashion, and seem to run words and sentences together. Clutterers may also repeat sounds, syllables, words, or phrases excessively. Despite these characteristics, they are typically unaware of any difficulty and may be talkative and outgoing.

Clutterers may also have academic problems in various subjects, yet these may or may not be severe enough to require specialized educational placement. In fact, some clutterers may excel in certain areas, such as mathematics. Overall, clutterers seem disorganized, always in a hurry, and unable to concentrate, perhaps due to a poorly developed attention span. In many things the clutterer does - speaking, writing, reading or working at specific

activities - there is a curious tendency to function in constant disarray (St. Louis & Hinzman 1986, pp. 134-135).

The first sentence in the UK version was shortened to state, "Their speech usually sounds 'cluttered' as though they are talking without a clear idea of what they want to say." Several other words (e.g., "specialised") were changed to accommodate British spelling.

#### Results

In general, clinicians in both the UK and USA were remarkably similar in their perceptions of cluttering. Table 2.1 summarizes results of information about clutterers reported in the two surveys. Most important, the number of clutterers with whom clinicians were acquainted was limited, about 1 each for UK respondents and 2.5 for those in the USA. Male-to-female sex ratios of 3.0:1 (UK) and 6.1:1, (USA) were quite different in the two samples. Differences in the education systems between the two countries may be responsible for these results which are quite dissimilar, although this hypothesis must be tempered by the fact that, again, a large percentage in both samples had no opinion. Approximately the same number of clutterers in the two countries (41-42%) were known to have normal classroom placement. A number of clutterers were known also to have some sort of special education placement, in the USA to a greater extent than in the UK. Of those clinicians who responded, most regarded the educational placement of their clutterers as appropriate to their educational needs.

The term "clutterer" was preferred by 75-80% of clinicians in both countries for this disorder. Seven to ten percent preferred the label of "stutterer." Relatively few preferred other labels such as "learning disabled" or "minimal brain dysfunction."

Respondents were asked to consider a list of possible symptoms of cluttering and then to identify those which they believed to be essential symptoms. Next, they were asked to consider the same list again and check those which were optional symptoms. These judgments were no doubt influenced by the summary of symptoms provided, although it was purposely vague on essential versus optional symptoms. Therefore, it can be assumed that the respondents' own knowledge, training, and experiences were primarily instrumental in determining which symptoms were obligatory

and which ones were optional. Tables 2.2 and 2.3 list the symptoms, rank-ordered from most identified to least identified for essential and optional, respectively. The UK clinicians agreed quite closely with USA clinicians on essential symptoms of cluttering. Of the 22 identical items (or

Table 2.1. Descriptive characteristics and educational placement of clutterers in the USA and UK. (Percent of total clutterers reported.)

DESCRIPTOR	USA	UK
Number of Clutterers Reported (n)	371	160
Number of Clutterers Acquainted With (X)	2.6	1.2
Sex Ratio of Clutterers (M:F)	3.0:1	6.6:1
Educational Placement (%)	)	
Regular Classroom	42.5	-
Normal School	-	41.9
Learning Disabled Classroom	25.0	-
School for Learning Disabled	-	14.4
Educable Mentally Handicapped (Impaired)		
Classroom	9.0	-
Trainable Mentally Handicapped (Impaired)	1	ì
Classroom	3.0	-
Behavior Disordered Classroom	5.0	-
School for Maladjusted	] -	0.6
School for Physically Disabled	-	0.6
Other	9.0	1.3
Don't Know or Not Reported	6.5	41.2
Agree with Placement (%)	62.9	41.9
Yes	5.0	4.4
No	31.8	53.7
No Opinion		

nearly so) in the two versions, the Spearman rank-order correlation coefficient between the two groups of respondents was .95 (see Table 2.2). By contrast, clinicians in the two countries were less likely to agree on optional symptoms, with a correlation of .70 (see Table 2.3). Respondents from the USA checked a mean of 8.8 essential and 6.7 optional symptoms. The UK respondents identified, respectively, 9.6 and 8.7 symptoms.

Table 2.2. Essential symptoms of cluttering reported by USA and UK samples and rank-ordered from most to least frequent. (Small letters refer to comparable items.) (Percent of total respondents.)

USA	%	UK	%
a. Fast speech rate	89.0	a. Fast speech rate	89.0
Run-on sentences	63.0	d. Lack of awareness/	82.3
b. Disorganized	59.7	poor monitoring	
thinking		c. Irregular speech rate	76.9
c. Irregular speech rate	59.7	(jerky speech)	
d. Unawareness of the	57.8	Dysrhythmic speech	56.9
problem	5572579	Reduction of polysyllabic	55.4
e. Word repetitions	47.4	words	
f. Sound/syllable reps.	44.8	Incorrect pausing	46.2
g. Phrase repetitions	41.6	Poor phrasing	44.0
h. Inability to get to the	40.9	h. Inability to get to the point	40.8
point	200	b. Disorganised thinking	38.
i. Reduced attention span	39.0	f. Sound/syllable reps.	37.
Revisions	33.8	Sound/syllable elisions,	37.
Academic achievement	26.6	e.g., fast /fa:s/	
difficulties	060	e. Word repetitions	32
. Misarticulations	26.0	k. Poor syntax/incomplete	30.
k. Poor syntax	25.3	sentences	20
l. Circumlocutions	25.3	i. Short attention span	30.
m. Interjection overuse	24.7	j. Misarticulations	29.
n. Motor coordination	21.4	g. Phrase repetitions	28
problems	20.1	n. Motor coordination	23.
o. Language delay	20.1	problems	21
p. Learning disabilities	20.1	Incorrect sequencing of	21.
q. Struggle during speech	19.5	sounds/syllables	21
r. Neurological impairment	16.9	m. Overuse of interjections l. Circumlocutions	21 21
Tension during speech s. Prolongations	11.7	Incorrect stress	19.
Handwriting difficulties	11.0	placement	17.
. Family history of cluttering	100	Reading difficulties	13.
Monotone speech	7.8	p. Learning disabilities	13.
Social maladjustment	7.1	o. Speech and language delay	13.
Secondary behaviors	3.3	Neutralising of vowels,	11.
. Poor music abilities	1.3	e.g. 'how come'/h ə k ə m/	***
The state of the s		r. Neurological impairment	9.2
		q. Struggle during speech	9.2
		t. Family history of	
		cluttering	
		Monotonous speech	9.2
191		u. Poor musical abilities	3.1
		s. Prolongations cluttering	1.5
The state of the s		5. 1 1010 inguitions of according	4.00

Table 2.3. Optional symptoms of cluttering reported by USA and UK samples and rank-ordered from most to least frequent. (Small letters refer to comparable items.) (Percent of total respondents.)

USA	%	UK	%
a. Misarticulations	40.0	c. Family history of cluttering	42.3
b. Neurological	35.7	k. Word repetitions	42.3
impairment	22.6	f. Phrase repetitions	41.5
c. Family history of	33.6	Reading difficulties	37.7
cluttering	20.7	e. Motor coordination	37.7
d. Language delay	30.7	problems	36.9
e. Motor coordination	29.3	b. Neurological impairment	36.9
problems Academic achievement	29.3	h. Learning disabilities	36.2
difficulties	29.3	j. Poor syntax/incomplete sentences	30.2
f. Phrase repetitions	27.1	m. Sound/syllable repetitions	34.6
g. Struggle during speech	27.1	Sound/syllable elisions,	34.6
h. Learning disabilities	27.1	e.g., fast /fa:s/	54.0
i. Inability to get to the point	27.1	Incorrect stress	38.9
j. Poor syntax	27.1	Incorrect sequencing of	33.1
k. Word repetitions	26.4	sounds/syllables	00.1
I. Reduced attention span	23.6	Poor phrasing	30.0
m. Sound/syllable reps.	21.4	a. Misarticulations	30.0
n. Prolongations	20.7	1. Short attention span	28.5
Run-on sentences	20.7	Reduction of polysyllabic	27.7
Handwriting	20.0	words	
difficulties		i. Inability to get to the point	25.4
o. Disorganized thinking	20.0	d. Speech and language	25.4
Tension during speech	18.6	dêlay	
p. Irregular speech rate	17.9	n. Prolongations	24.6
q. Unawareness of the	17.1	r. Circumlocutions	24.6
problem		o. Disorganised thinking	24.6
r. Circumlocutions	16.4	Neutralising of vowels,	23.9
Revisions	16.4	e.g. 'how come' /h ə k ə m/	
Monotone speech	15.7	s. Poor musical abilities	23.1
s. Poor music abilities	15.0	t. Overuse of interjections	21.5
Secondary behaviors	15.0	Incorrect pausing	20.8
t. Interjection overuse	13.6	g. Struggle during speech	19.2
u. Fast speech rate	6.4	Dysrhythmic speech	19.2
		p. Irregular speech rate	14.6
		(jerky speech)	140
		Monotonous speech rate	14.6
		u. Fast speech rate	13.1
		q. Lack of awareness/	10.8
		poor monitoring speech	

What is clear from Tables 2.2 and 2.3 is that disfluencies are not the most frequently identified essential symptoms. Instead, clinicians noted rapid and irregular speaking rates and other prosodic disturbances such as

dysrhythmic production, improper phrasing or pausing, and lack of awareness or speech monitoring as the primary symptoms. Sound/syllable repetitions ranked fairly high in both samples, although this is typically regarded as a stuttering - not cluttering - symptom (St. Louis, Hinzman & Hull 1985). Preus (Chapter 5) regards such repetitions as one indication that cluttering and stuttering are present in the same individual. The other typical stuttering disfluency, prolongations, was ranked low in both countries. Word and phrase repetitions were more frequently identified as essential symptoms of cluttering by USA than UK clinicians.

Optional symptoms were identified quite differently in both samples, and, as noted above, there was less agreement for comparable optional symptoms than for essential symptoms. Among the highest rated symptoms in both surveys were family history of the disorder, motor coordination problems, neurological problems, and academic or reading problems. Slightly less frequently identified in both groups were learning disabilities, phrase repetitions, and syntactic problems. The UK respondents scored word and phrase repetitions more frequently as optional than essential symptoms and much more frequently than did USA clinicians. They also scored misarticulations and struggle much less frequently than USA respondents. With a few exceptions, what respondents identified frequently as essential symptoms were usually unlikely to be reported as optional symptoms, and vice versa. Overall these are quite consistent with the literature (Weiss 1964; Luchsinger & Arnold 1965; Van Riper 1971; Dalton & Hardcastle 1977, 1989; St. Louis et al 1985; Daly 1986).

Respondents from Britain and America were quite similar in perceptions of the most likely cause(s) of cluttering. Table 2.4 indicates that "organic predisposition affected by experience" was identified most frequently, by 46% of USA clinicians and 59% of UK clinicians. "Definite physiological differences" was also frequently identified, by 42% and 52% of the groups, respectively. The remainder of causes were checked by one-fifth, or fewer, respondents. There was a 10% difference for the "learned" category, in which Americans preferred it in 14% of cases, compared to Britons at 4%.

Clinicians were queried about specialized training in cluttering. When asked to respond to the question, "Do you feel adequately trained to work with child clutterers?" only 29% of the UK clinicians who answered responded affirmatively. Twenty-five percent said "yes" to the same question for adult clutterers. The USA sample resulted in analogous figures of 41% and 37%.

Table 2.4. Most likely cause(s) of cluttering identified by clinician in the USA and UK. (Percent of total respondents.)

CAUSE	USA	UK
Definite physiological (organic differences) Organic predisposition affected by experience Learned Psychologically based	41.5 46.3 14.3 19.1	51.5 58.5 4.2 20.8
No opinion All others	17.0 7.5	15.4 3.1

Sources of specialized training in cluttering were remarkably similar in the two samples (top of Table 2.5). Approximately one-quarter each of the total responses listed were from publications, coursework, and clinical practice. The next highest source of training was from other professionals. Few clinicians identified any other sources.

For those who responded negatively to the adequacy of training questions, the bottom part of Table 2.5 shows that insufficient academic training, lack of clinical experience with clutterers, and lack of published information were the most frequently identified reasons. Since "lack of information published" was not included in the UK questionnaire, the two samples probably cannot be compared on this item. Suffice to say that there were no commonly accepted sources of information on cluttering, and these undoubtedly contribute, in part, to the perceptions of up to 75% of clinicians that they felt inadequately prepared to manage clutterers.

Clinicians reported the type(s) of therapy utilized with their cluttering clients. St. Louis and Hinzman (1986) asked American clinicians to identify therapies for child clutterers on their caseloads; the authors of this chapter asked British clinicians about both children and adult clients. Table 2.6 summarizes the responses. What is immediately clear is that "stuttering" therapy techniques were utilized much less frequently than "rate," "language," and "articulation" techniques, at least with children. For UK clutterers of all ages, "rate control" was the most frequently identified therapeutic goal, followed next by "social skills." For the adults in the UK, "language" and "articulation" therapy was reportedly used substantially less frequently than with children.

Table 2.5. Sources of training in cluttering for those responding "yes" to the adequacy of training question and reasons for those responding "no" for USA and UK clinicians. (Percent of total listed.)

ADEQUACY OF SPECIALIZED TRAIN	ING'	?
	USA	UK
SOURCE OF INFORMATION FOR THOSE		
RESPONDING "YES"		
Articles (publications)	24.9	26.7
College coursework	20.1	22.9
Clinical practice	25.4	28.6
In-service training		2.9
Other professionals in speech pathology	16.3	17.1
Own research	9.0	1.0
Other	3.7	1.0
REASONS FOR "NO" RESPONSES	11.2	12.9
Unsure what cluttering is	33.6	40.3
Insufficient academic training in cluttering	22.4	
Lack of information published	25.8	41.9
No therapeutic experience with clutterers Others	4.2	4.8

The "other" category included a wide variety of approaches. The USA respondents listed such goals as: vocabulary, confidence building, relaxation, breath control, sequencing, cognitive behavior modification, written language, "chunking," and auditory/visual discrimination. UK clinicians mentioned: Personal Construct Therapy (Kelly 1955), auditory memory, counselling, insight feedback, assertiveness, sequencing syllables according to the Nuffield dyspraxia program (Connery 1985), and listening /attention skills. Clearly, there is little unanimity of purpose or procedure in the clinical treatment of clutterers in either of the two countries.

Table 2.6. Therapy techniques for cluttering employed by clinicians from the USA and UK. (Percentage of therapy types for all clients listed.)

Type of Therapy	USA Child		UK Adult	
Rate	22.6	25.4	30.2	
Articulation	24.4	14.6	7.4	
Language	25.7	19.2	6.0	
Stuttering	12.6	10.3	14.8	
Voice	0.8	1.5	2.7	
Aural rehabilitation	3.3	-	-	
Cognitive	-5	5.6	7.4	
Social skills		21.1	27.5	
Other	10.6	2.3	4.0	

<sup>\*</sup> These figures are different from those in Table 9 of St. Louis and Hinzman (1986). Those percentages reflected the percentage of total respondents listing therapy types for the first child listed. These show the distribution of the total therapy types for all children in the 1986 survey without reference to the number of respondents.

Neither questionnaire specifically asked clinicians about prognosis or effectiveness of therapy. Nevertheless, a number of them wrote comments about their lack of success with this group. One USA clinician wrote, "For two and a half years, this clutterer has not improved." Another wrote, "Rate is the biggest problem and hard to remediate." A UK therapist commented, "The lack of awareness of the effect his speech has on his listener makes therapy difficult and a frustrating exercise for the therapist." Another echoed the same theme by noting that "Treatment is often not very productive due perhaps to poor self monitoring skills." In general, comments from both studies indicate that clinical treatment of clutterers is difficult and not very successful. Even so, there were a few exceptions; one USA clinician wrote, "I have had great treatment success treating it as related to rate, rhythm, auditory feedback, and oral musculature control."

#### Issues and Possible Solutions

From the information summarized in this and other chapters, it is clear that a number of troubling issues face clinicians who take on the challenge of managing clutterers. In this section we shall identify the most salient problems and then suggest some solutions.

An issue of primary importance is definition. This matter is dealt with in detail in several chapters in this book. Here we concur with Myers and St. Louis (Chapter 1) and others that cluttering is a disorder distinct from stuttering, although there are obviously areas of overlap between the two disorders (Weiss 1964; Van Riper 1971, 1982; Dalton & Hardcastle 1977, 1989). We also take the view that cluttering is an entity distinct from learning disabilities (St. Louis & Hinzman 1986).

Another issue is clinicians' reluctance to deal with clutterers. Clinicians are often fearful or unwilling to manage stutterers (Wingate 1971; St. Louis & Lass 1981; Thompson 1984; Cooper & Rustin 1985), hold negative biases about stutterers (Yairi & Williams 1970; Woods & Williams 1971, 1976; Turnbaugh et al 1979; White & Collins 1984; Lass et al 1989; Ham 1990), and have serious limitations in clinical training (Leith 1971; St. Louis & Lass 1980; Curlee 1985; Mallard et al 1988). The survey described in the introduction to this chapter (St. Louis & Durrenberger 1991) suggests that the prospect of working with clutterers evokes many of the same feelings. Uncertainty about the effectiveness of treatment and the limited number of clients seen from this population are, no doubt, strong contributing factors.

A third issue of importance is the lack of knowledge available on cluttering. The reviews in other chapters in this volume attest to the fact that, compared to such disorders as stuttering, articulation disorders, language disorders, and the like, very little is known about clutterers. Not surprisingly, therefore, clinicians have little or no specific training in cluttering and minimal, if any, experience in treating them.

Foremost among suggestions which would most likely improve the state of clinical affairs with clutterers is a call for solid research. Careful investigations into the nature of cluttering would be particularly helpful, e.g., etiology and such epidemiological variables as age of onset; course of the disorder; recoveries; and coexistence with other speech/language, behavioral, or physiological conditions. Differentiations of the necessary features of cluttering from those of stuttering and learning disabilities is critical as well. As part of that effort, better documentation of the type and

frequency of various disfluency types in the speech of clutterers would be most useful. In addition, studies of speaking rate, rhythm, and prosodic characteristics would aid in understanding the perception that the clutterer's speech is characterized by rapid or irregular rate, dysrhythmic utterances, and abnormal pauses.

There is a desperate need for clinical treatment studies in cluttering. We are unaware of any recent research in this area. What clinical procedures are effective - or most effective - with clutterers? What percentage of clutterers of various ages are successful in treatment? What prognostic variables predict success or failure in therapy? These and other questions must be addressed if the treatment of cluttering is to move beyond the "hit-and-miss" approaches currently employed.

As information is collected and compiled, such as that presented in this volume, there is a need to make it available to clinicians. We recommend that a section on cluttering be incorporated into coursework on fluency disorders at the university level so that new clinicians are made aware of the disorder. Textbooks on stuttering could well include at least one chapter on cluttering. The rare clutterer who is seen in university clinics could be videotaped and the tape made available to students for observation. For clinicians working in schools, hospitals, and clinics, cluttering should be included in the menu of topics for continuing education. As is clear from this volume, a few individuals have considerable expertise in the treatment of clutterers. Their expertise should be made available to the practitioner.

Finally, and equally important, there is a need for well-written lay articles or television programs on cluttering for the public. Many clutterers are probably either unaware of their difficulty or unaware that remediation is possible (Daly 1986, Chapter 7). Ultimately, if more clutterers are to be seen for therapy, it is likely that they, themselves, their families, or their teachers will be primarily responsible for referrals.

The self-help group movement for stutterers has grown rapidly in the past decade (Hunt 1987; Kneflar 1987). Self-help groups would seem to be useful and helpful for clutterers as well. The problems faced by clutterers are frequently different than those of stutterers, such as difficulty being understood and the inability to monitor without constant vigilance. Other problems of these two groups of fluency disorders are similar, e.g., inadequate social skills and feeling that their problems are unique. Group sessions designed to provide insight about cluttering and individual

experiences would likely assist clients in recognizing and dealing more effectively with their problems. Perhaps the self-help effort could include sessions attended by clutterers, teachers, peers, and parents to discuss problems felt differently by each group.

## Summary

In this chapter we have considered clinicians' preferences, perceptions, and awareness about the communicative disorder of cluttering. Clinicians in both the USA and UK have remarkably similar impressions regarding clutterers, many of them consistent with the literature, but a troubling proportion reflecting pessimism or ignorance. We have no reason to assume that clinicians in other countries would not have similar views. For the sake of clutterers and those who attempt to diagnose and treat them, we call upon the research and clinical community to adopt "the orphan in the family of speech-language pathology" (Daly 1986, p. 155) and give it the care and attention it deserves.