



COMMON LANGUAGE for PSYCHOTHERAPY (clp) PROCEDURES
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SPEECH RESTRUCTURING

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Definition: Procedures to reduce or eliminate stuttering by changing aspects of speech production.

Elements: Speech restructuring therapy trains clients to use a new speech pattern to reduce or eliminate stuttering while sounding as natural as possible. The speech pattern involves slower speech, extended vowel duration, gentle vowel onsets, continuous voicing, continuous airflow, controlled exhalation, and diaphragmatic breathing. Variants are prolonged speech, smooth speech, and fluency shaping. Programmed instruction shapes clients' speech rate or naturalness, starting slowly and moving gradually towards natural-sounding speech at a normal rate. In speech restructuring without programmed instruction the client hears and sees the therapist model speech changes in connected speech, plus video or audio examples, done slowly first and then at a natural rate. Clients who have difficulty in generalising speech improvements to everyday situations may also have exposure and/or cognitive restructuring. Typically, half of clients achieve natural-sounding speech.

Related procedures: Slow speech, syllable-timed speech, metronome-aided speech, shaping, skills training, rehearsal.

Application: Usually by trained speech-language pathologists/therapists, done either individually, weekly or in intensive groups which may be residential spanning days or weeks, or both, or by phone/email consultations plus high-quality web cams, in which the clinician reviews clients' recordings of their speech practice. Speech restructuring normally follows a detailed manual.

1st use? Goldiamond (1965)

References:

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3. O'Brian S, Block S, Cream A (2009) Case studies: Adults. Chapter in Onslow M, O'Brian S, Packman A, Menzies R (Eds) *The clinical trials evidence for stuttering treatments*. Austin, TX: Pro-Ed.
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Case illustration (Adapted from O'Brian et al, in preparation)

Patrick, age 47, referred himself for severe stuttering which had been present most of his life and impaired his ability to work and been the main reason he had left teaching. He reported no speech-related social anxiety. Pre-treatment, he stuttered a mean of 7% of syllables over 3 speech samples recorded outside the clinic. At the start

of speech restructuring therapy, during three 1-hour weekly individual teaching sessions Patrick learned to control stuttering by speaking using restructuring Elements (see above) and rating stuttering-severity and speech-naturalness on 9-point scales. Thereafter he had one 7-hour group-practice day with 2 other patients and a clinician, aiming at stutter-free speech without programmed instruction. Patrick tried different ways of combining elements of speech restructuring to control his stuttering while sounding as natural as possible, and by the end of the day could speak with zero stuttering and natural-sounding speech. From a week later he had ten 1-hour, weekly, individual problem-solving sessions with a clinician to review progress and learn to identify and solve problems with generalising and maintaining stutter-free speech in everyday situations such as conducting interviews and giving verbal presentations at work. After 20 therapist hours (3 individual teaching hours, a 7-hour group-practice day, and 10 individual problem-solving hours), Patrick had ceased stuttering outside the clinic and his speech-naturalness was within the normal range.

Patrick then had 7 maintenance sessions over 13 months, spaced at intervals of 2 weeks, 2 weeks, and 1, 1, 2, 2 and 6 months which depended on his speech samples recorded outside the clinic meeting preset criteria: stuttering below 7% of syllables and a speech naturalness score of 3 or less on a 1-9 scale. After treatment, Patrick was satisfied with his improvement. He controlled his stuttering outside the clinic most of the time, though interviews and presentations at work still proved difficult at times. To maintain gains, he still had to practise his speech regularly and to focus on controlling his stuttering much of the time.