[O28]
"Functional Communication Modification Therapy": Effects on adults who stutter
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Intoduction and aims of the study: Functional Communication Modification Therapy (FCMT) is a communicative approach to stuttering therapy. It is based on the principles of block modification, avoidance reduction therapy, solution focused brief therapy, personal construct psychology, active imagination and self organized learning. It is implemented by means of intensive group therapy programmes. During the Intensive phase (15days/75hours) group members are encouraged to identify and explore their own stuttering behaviours, feelings, beliefs and attitudes associated with the action of speech. They explore the effects of speech techniques on their speech and they use techniques to desensitize and to gain control over communicative events. Emphasis is given to the functional use of speech techniques as a means to achieve predetermined communicative results. Group members learn to identify their needs, to set goals, to organize step by step actions, to evaluate the outcome and to reflect on this process in order to gain control over significant communicative situations and to establish long term communicative changes. The aim of this research is to provide preliminary evidence on the effectiveness of the approach.

Method:.8 adults (two therapy groups) have taken part in the study. Data has been collected by means of video, audio recordings and formal questionnaires in four consequent phases (pre- and post-therapy, one and six months post therapy). For the overt stuttering behaviours the percentage of stuttered syllables (%SS) in two different tasks (interview and reading) has been measured. For the evaluation of the covert features the S24 questionnaire has been used. For the assessment of the impact of stuttering in the person's life the OASES and the WASP profiles have been administered. The non-parametric Friedman test was used to examine possible differences in the measurements among the four phases. Given the relative small sample size the exact test procedure (IBM SPSS) was implemented. Pairwise comparisons between phases were conducted using the Wilcoxon test. The Holm's sequential Bonferroni method was used to control for type I error. Group differences were examined using the Mann-Whitney test. The intraclass correlation coefficient (ICC) has been administered to test inter-rater reliability for the %SS measurements.

Results: Friedman test showed a statistically significant effect in all tasks among the four phases (exact $p<.001$) and values of the Kendall's coefficient of concordance indicate a strong effect. Pairwise comparisons revealed significant differences between pre- and post-therapy values ($p<.0167$) in all tasks (except S24), but non-significant differences between post-therapy and 1-month ($p<.025$) and post-therapy and 6-months ($p<.05$) values. This means that there was a significant change as a result of therapy that has been retained for a period of six months. Mann-Whitney test showed no statistically significant differences between the two groups. High Inter-rater reliability has been found for %SS (interview: ICC=.988; reading: ICC=.996).

Comparisons of the mean rank scores of the examined variables
across the four measurements

	pre-therapy	post-therapy	post-1-month	post-6-months
Interview %SS	4.00	1.57[a*]	1.57	2.86
Reading % SS	4.00	2.08[a*]	1.92	2.00
S24	3.71	3.00	1.50	1.79
WASP	4.00	2.43[a*]	1.43	2.14
OASES	4.00	2.71[a*]	1.36	1.93

Pairwise comparisons: a = comparison between pre and post-therapy measurement, *$p< .0167$ to be declared as significant. b = comparison between post-therapy and post-1-month measurement **$p < .025$ to be declared as significant. c = comparison between post-therapy measurement and post-6-months *** $p < .05$ to be declared as significant.

Conclusions: FCMT was effective in decreasing the moments of stuttering (expressed in %SS). It has also been proved effective in reducing covert stuttering characteristics and in changing the impact of stuttering in communication. Therapy effects have been retained throughout the research period (6 months).

References

1. Abdi, H. (2010). Holm's sequential Bonferroni procedure. In N. Salkind (Ed), Encyclopedia of Research Design. Thousand Oaks, CA: Sage.
2. Andrews, G. & Cutler, J. (1974). Stuttering therapy: The relationship between changes in symptom level and attitudes. *Journal of Speech and Hearing Disorders*, 38, 312-319.
3. Beck,J.S.,(1995). *Cognitive Therapy:Basics and Beyond*. New York: Guiford Press
4. De Shazer, S. (1988). *Clues:Investigating Solutions in Brief Therapy*. New York: Norton
5. Fransella, F. (1972). *Personal change and reconstruction*. London: Academic Press.
6. Green, S. B., Salkind, N. J., & Akey, T. A. (1997). Using SPSS for windows: Analyzing and understanding data. Upper Saddle River, NJ: Prentice Hall.
7. Harri-Augsten, S. & Thomas, L. , (1991). *The self-organized way to personal and organizational growth*. London: Routledge
8. Holm, S. (1979). A simple sequentially rejective multiple test procedure. Scandinavian Journal of Statistics, 6, 65-70.
9. Jung, C., (1997) *Jung on Active Imagination*. Princeton: Princeton University Press.
10. Kelly, G. A. (1955). *The Psychology of Personal Constructs: Vol. 1.* New York: Norton.
11. Mehta, C. R., & Patel, N. R. (1996). SPSS Exact Tests 7.0 for Windows. Chicago, IL: SPSS, Inc.
12. O'Halon & Weiner-Davis, (1989). *In Search of Solutions*. New York: Norton
13. Sheehan, J. (1975). Conflict theory and avoidance-reduction therapy. In J. Eisenson (Ed.), *Stuttering, second symposium* (pp. 97–198). New York: Harper & Row.Van Riper, C. (1973). *The treatment of stuttering* (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.
14. Yaruss, J.S., & Quesal, R.W. (2008). *OASES: Overall Assessment of the Speaker's Experience of Stuttering*. Bloomington, MN: Pearson Assessments.
15. Wright, L., & Ayre, A. (2000) *WASSP: Wright and Ayre Stuttering Self-Rating Profile.* Bicester: Speechmark.