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EMOTIVE ASPECTS OF THERAPEUTIC LANGUAGE: A PILOT STUDY ON VERB-ADJECTIVE-RATIO

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When studying utterances the therapist makes in the interaction with his patient several problem areas become apparent, which concern aspects of grammar and content. We would like to present for discussion an investigation of usage of linguistic categories as an example of the type of questions asked in this field.

What can we say, about the therapist's interactive style and the influence the patient has on him, from looking at frequencies of adjective and verb usage. A short overview over the literature encouraged us to single out the Verb-Adjective-Quotient (VAQ) as a possible fruitful variable for describing a grammatical property of patients' and therapists' speech which might be easily accessible to computer-aided content analysis.

Research into the VAQ has so far concentrated on patients with different diagnoses. Only a few studies have dealt with the style of the therapist. We know of only one study which has looked at the VAQ of the therapist (GOLDMAN-EISLER 1954). She analysed the language of three psychiatrists grammatically and obtained for them VAQ values of: 3.05, 2.13 and 2.49 (standard deviations of 0.29, 0.22 and 0.08 respectively). She suggests that this is a more constant measure than the other ones which she also calculated, such as the number of words per minute, self-references or nouns.

1 Our study

In carrying out the present study our main interest was in the therapist's language, however. We began by proposing the following hypothesis: On the basis of the assumption, that the therapist is calm and balanced in the dialogue with his patient and due to emotional stability, he is able to conduct the conversation in a relatively objective way.

After STERN (1930) and STERN & BUSEMANN (1925) the emotional stability or movement of an individual can be seen in a 'qualitative' or 'active' style. A qualitative style is expressed in a relatively great number of adjectives and an active style in a relatively great number of verbs. BODER (1939) examined American texts from different literary genres and found for drama which probably comes closest to spoken language that 20 adjectives for 100 verbs were sufficient for 85% of all the plays, that would mean a VAQ of 5. After Stern (1930) qualitative and active styles are independent of

the topic discussed. He sees differences in style as symptomatic for the individual person. For these reasons we would expect for the therapist a low and constant VAQ of about 5.

The material on which this study is based - identical with the material already described in Kächele's contribution - are 30 initial interviews, 10 for each of three therapists. It's composition would allow us to study individual differences among therapists in initial interviews.

One of us (Wirtz) has written a program which attributes the appropriate linguistic category to every word of a text. There are two texts for each interview. One made up of the therapist's the other of the patient's utterances. After making up a vocabulary of a text, which consists of all the different words and the frequencies of their appearance, each individual item of this vocabulary is compared with its corresponding item in the basic vocabulary where the word category is stored and can be retrieved. The program then tallies the number of identified verbs and adjectives. As the total number of words is counted as well, percentages can be computed and then the VAQ is determined.

Table 1 gives the VAQ means and standard deviations for each therapist and each client group.

Table 1: VAQ means and standard deviations for each therapist and each client group

Therapist		A 432	A 105	A 11
	$\overline{\text{VAQ}}$	3.34	3.00	2.88
	S	0.95	0.38	0.36
Patient	$\overline{\text{VAQ}}$	2.57	2.43	2.74
	S	0.55	0.65	0.30

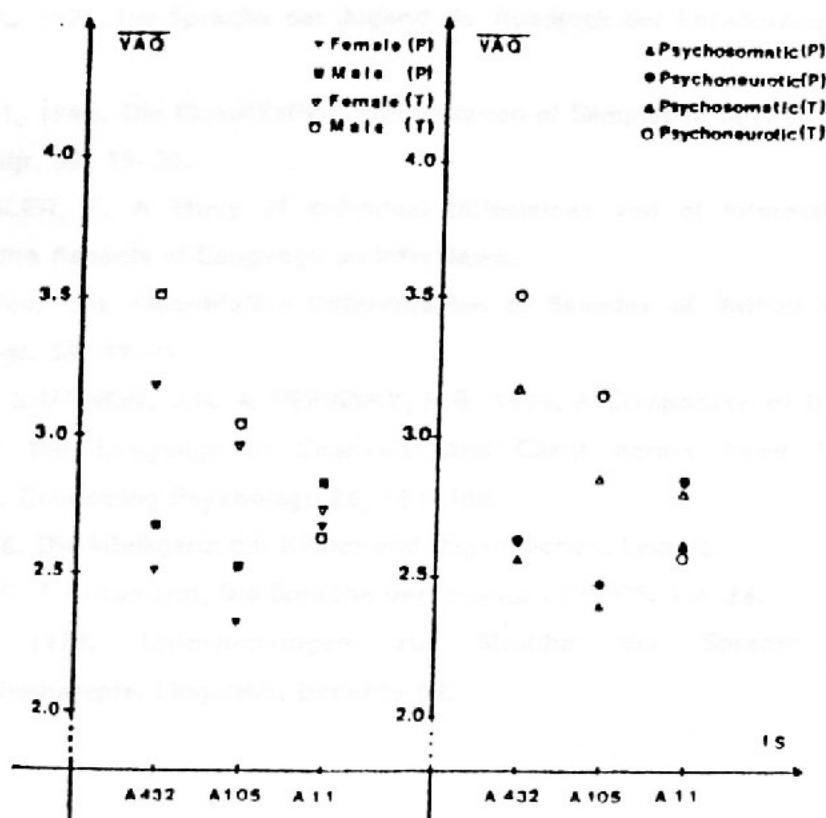
As our results were not conclusive we decided to divide up the patient sample according to distinguishing characteristics such as sex and diagnosis. The table 2 contains the values computed for a distribution according to these criteria.

Therapist		A 432	A 105	A 11
	Male	3.51 ± 1.25	3.05 ± 0.52	2.64 ± 0.40
	Female	3.18 ± 0.65	2.96 ± 0.24	2.72 ± 0.37
	Psychosomatic	3.17 ± 1.21	2.85 ± 0.33	2.80 ± 0.18
	Psychoneurotic	3.52 ± 0.72	3.15 ± 0.37	2.59 ± 0.45

Patient	Male	2.68 ± 0.65	2.53 ± 0.87	2.83 ± 0.36
	Female	2.51 ± 0.49	2.33 ± 0.41	2.66 ± 0.23
	Psychosomatic	2.56 ± 0.67	2.39 ± 0.69	2.60 ± 0.34
	Psychoneurotic	2.63 ± 0.48	2.47 ± 0.68	2.84 ± 0.25

Table 2: VAQ means and standard deviations for each therapist and client group according to their sex and diagnosis

The values for VAQ go from 2.59 to 3.52 for the therapists and from 2.33 to 2.84 for the patients. The therapist quotient is generally higher, especially for A 432 and A 105 than for the patients. Patients of therapist A 11 have the highest VAQ values while therapist A 11 himself has the lowest values. This becomes apparent from the next figure. It shows patient values distributed according to sex of the patient and according to diagnosis and the reaction values of the therapists.



In all three groups the male patients show a somewhat higher VAO than the psychoneurotic patients. Though the differences between men and women are small, they seem to be a constant feature.

Grouping patients according to diagnoses made by the Interviewers themselves we found no significant within-group variability though a therapist's influence can be seen.

More than the patient groups the interviewers differ in their VAO values in reaction to the patient group. One of the therapists (A 432) shows a strong reaction to the different groups. His VAO means for the female group and for the psychosomatic group are nearly the same, just as for the male and psychoneurotic group, while the standard deviations for the male and the psychosomatic group are greater than for the female and the psychoneurotic group. Therapist A 105 varies between the psychosomatic and the psychoneurotic group more than between the male and the female group. Therapist A 11 shows less variability but he reacts always in the opposite way to the other two therapists.

We did not try to disentangle sex and diagnosis as the resulting groups would be much too small for statistical treatment.

2 Discussion

Using a formal measure such as the VAQ requires a careful and slow approximation to its clinical significance. To put it simply, it describes the relation of action processes in language to the affective coloring.

A low VAQ signals that the speaker uses a relatively great number of adjectives to go with the verbs thus ornamenting his statement. We know from the study by GOLDMAN-EISLER (1954) that the VAQ turned out to be a constant measure for discriminating among three doctors and among individual patients which were seen by the three doctors. In this study the values for the patients were also significantly lower than those of the physicians. Thus they represent a parallel for our result. We would suppose lower VAQ showing more adjectives, to mean more associative richness in language. It might be attributable to style of interviewing that the therapists in our sample varied considerably. When comparing therapists across groups by means of t-test and chi-square, we found that therapist A11 differed significantly from the other two. Therapist A11 and A105 showed little variability, whereas therapist A432 exhibits considerable changes in score. This variability in the VAQ can be interpreted in terms of a reaction to the different diagnostic and sex groups, though his patients in actual fact do not vary greatly.

The results of this pilot study encourage us to enlarge the sample in order to try and stabilize the results in the future. The aim of this line of research is to develop a routine procedure for measuring one aspect of therapist style.

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THEMES OF ANXIETY AS PSYCHOTHERAPEUTIC PROCESS VARIABLES

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1 Anxiety Topic Dictionary (ATD)

I want to report on some details of the construction and application of a content-analytic dictionary for the assessment of anxiety themes in psychotherapeutic treatments. Within this frame of reference it seems to me to be unnecessary to give reasons for the concentration on anxiety and on methods of computer-aided content-analysis.

One of the main problems in computer-aided content-analysis is the construction of a valid dictionary; in such a dictionary variables are operationally defined as they are meaningful and sensible with respect to a given theory, in our case with respect to psychoanalytic theories of anxiety. On this theoretical background, 4 typical situations