Egypt. J. Psychiat. (1983) 6 : 213–298

Thought Disorder in Schizophrenia: Relation to Activity and Temporal Dimensions (Part - II)

By Y. T. Rakhawy, Y. Amin, E. Hamdi, R. Mahfouz and M. Howaidi

ABSTRACT

The transcribed responses of 20 schizophrenic patients to a free verbalization interview and a word meaning test were subjected to a content analysis. Different variants of thought disorder were assessed in each test. The data collected were analysed respectively according to the time factor and to the activity dimension.

The correlation between the activity dimension and the severity of thought disorder was found to be highly significant. However, no consistent significant findings were found in relation to the duration of the schizophrenic illness. Chronicity appeared to be much more dependent on the activity dimension than on the time factor. Moreover, both the word meaning test and the free verbalization interview proved to be useful tools in the screening of thought disorder.

INTRODUCTION

Although most clinicians agree that schizophrenic patients characteristically show disordered thinking (Mahfouz, 1977); yet there is little agreement as to what the clinical manifestations of such disorder are. Like schizophrenia itself in its heterogeneity and complexity, thou-

ght disorder is a subject with many faces and presentations. Many attempts were advanced in order to deal with the great diversity of such a vast phenomenon. The discovery of general variables that exert an important influence on the clinical expression of thought disorder in schizophrenia may help to unravel its nature. Moreover, thought disorder might be better examined from different aspects through the use of different clinical tools.

This work was forwarded by a presentation of the study of the use of clinical assessment as well as of a proverb test to examine and quantify thought disorder in relation to the activity and the temporal dimensions (Rakhawy et al., 1983).

This article has a double purpose : first is to attempt to measure the manifestations of thought disorder in schizophrenia in relation to the activity dimension as well as to the temporal factor. Second is to evaluate the use of two newly designed clinical tools, namely the word meaning test and the free verbalization interview, in elucidating the manifestations of thought disorder.

The activity dimension was previously delt with in a detailed manner in part one (Rakhawy et al., 1983). In short, the activity dimension rests upon the more basic consideration of schizophrenia as a disease process with various clinical presentations. It describes the processes that exert a pathoplastic effect on the schizophrenic process as a whole. As proposed by Rakhawy (1979), the activity dimension stems from a clinica-structural conception. The detailed study of both the longitudinal progress of symptoms as well as the cross-sectional ones allows the observer to situate the stage of illness along the schizophrenic process. Here the clinical manifestations have their psychostructural correlates with different levels of disintegration or splitting. Accordingly in an active process, the clinical picture is almost continuously changing and the structural relation is that of progressive disorganization with attempts at reorganization of the personality. In opposite polarity, in an established schizophrenic process, the clinical

picture has become more or less stable at a certain pattern, and the structural relation is that of progressive disorganization.

MATERIAL AND METHOD

Patient Sample :

Twenty male schizophrenic patients were selected at random. The median age of the sample was 28.8 years with a range of 18 to 38 years. All cases belonged to the upper and lower middle class. The educational level ranged from the preparatory certificate to college graduation (mean 10.9 years, range 6 to 15 years). Among the 20 cases, 9 (45%) were unemployed, 7 (35%) were students, and the remainder 4 cases (20%) had different occupations. Again 18 patients were single, one divorced and one married.

The diagnoses were made according to the Egyptian Diagnostic Manual of Psychiatric Disorders (Egyptian Psychiatric Association, 1975). Diagnoses were arrived at by the consensus of two experienced psychiatrists who were unaware of the test results. One of the two clinicians has come to be in close contact with the patient over a long period. The duration of the illness ranged from 1 year to 25 years (mean = 9.3 years). The distribution of type diagnoses was as follows: incipient schizophrenia (one case), schizo-affective (two cases), paranoid (six cases), hebephrenic (five cases), chronic undifferentiated (three cases), simple (two cases) and others (one case).

As regards medication, most cases were under classical treatment of the disorder. Since such a variable is an indispensable constant in the majority of research dealing with thought disorder, we were able to proceed with our study without much fear of incomparability.

Data Collection and Assessment Technique :

Word meaning test and free verbalization interview were used as tools to assess thought process and thought content disorders from different aspects.

The word meaning test :

This clinical tool was particularly designed by Rakhawy (in Amin, 1982) in order to investigate three aspects of a word. The first one is the cognitive aspect, that is its conceptualization. The second one is an experiential aspect, that is the emotional resonance of the word. The third one is the conative or volitional implications of the word. The underlying assumption is that there are three integral parts of the meaning of a word (Sullivan, 1925). In other words, the word meaning test aims at exploring the possible effects of the schizophrenic process on this integral cognitive-affective-volitional structure of the meaning of a word.

Nine words representing broad concepts were intentionally selected so as to belong to the Egyptian slang (colloquial words). These are namely (work-peace -war -disinterest (laissez-faire) -undue favoritism-challenge -tenderness -children- old people). The exploration of the meaning of such words was not eventually aiming at the exploration of theoretical well made meanings (bookish definitions) but aiming at examining the meaning of words that stem from every day contact of life with reality.

After the presentation of each word the testee was provided suc cessively with the following questions : What does this word mean to you? What does it mean to other people? When you hear this word or when you heard it now what do you usually feel or what did you feel now? What is the decision that you make when you hear this word taking in consideration that such decision concerns you personally and can start now or today?

The free verbalization interview :

With a few notable exceptions, little attempt has been made to use the free verbalizations of the schizophrenic to better describe thought disorder. Meadow **et al.** (1953) have collected free speech sample from chronic schizophrenic patients and obtained high inter- - judge reliability on scoring impaired associations from type scripts.

Gottschalk and Gleser (1961, 1969) have used free speech samples of schizophrenic but have studied mainly content or thematic elements of their speech. Weintraub and Aronson (1965) have used a verbal behavioral analysis of free speech but have studied primarily psychological defensive mechanisms. Reilly et al. (1973), using the free verbalizations interviews, have investigated thematic content shifts in acute schizophrenics, as they moved from the psychotic to the recovered state. In another study, Reilly et al. (1975) have studied the presence of looseness of associations during the acute phase. Furthermore, Siegel et al. (1976) have studied sampels of free speech collected from two groups of chronic schizophrenic subjects, namely the multi-year hospitalized schizophrenics and the ambulatory (or functioning in society) schizophrenics.

In this work, in order to assess the presence of looseness of associations (six variants) and other variants of deviant speech patterns – that are namely gap in communication, private meaning, delusional thinking, vagueness of ideas, abrupt time shift, repetition, perseveration, overall deviant verbalizations and paucity of response- a free verbalization interview was used. Each patient was invited to speak freely on any topic for an average of 4 minutes.

All responses to the free verbalization interview and the word meaning test were tape-recorded and transcribed verbatim. Subsequently, they were subjected to a content analysis along a specially designed coding manual for each of the previously mentioned clinical tools.

Operational definitions for each of the assessed variables were provided as well as models from the patients verbatim responses. Moreover, the process of assessment was forwarded by a pilot study and many raters shared in.

The data collected were analysed according to two variables :

1 – the activity dimension.

2.– the duration of the illness.

In order to study the activity dimension in its relation to the pro-

cess and content of thought in our subjects; patients were classified into five groups : @

Group I : The clinical picture is dominated by ambitendency, ambithoughts and ambivalence. Psychostructurally these cases are characterized by duality (early splitting) with equivalence of psychic forces.

Group II : characterized clinically by symptoms of loss of ego boundaries such as thought withdrawal, thought insertion, and thought broadcasting. Psychostructurally this group presents more advanced stages of splitting where one organization starts to perceive the other with minimal projection. It corresponds to Bleuler's concept of schizophrenia.

Group III : characterized clinically by adaptation at a lower level, blunting of emotions, and deficitary symptoms. Psychostructurally this group presents a stable compromise between the split parts.

Group IV : The clinical picture is characterized by the presence of relatively fixed and systematized delusions. These seem to be the object upon which the split parts agree, thus establishing a certain compromise between them.

Group V : characterized clinically by severe signs of disorganization. Structurally this group manifests fragmentation of the ego (s) with independent activity and simultaneous interference between the widely split psychic organizations.

For the purpose of correlating the manifestations of thought disorder to the duration of the schizophrenic illness our sample was re-classified into 4 groups (A-D). @

@ Two cases were excluded for each was presenting a different level of activity from the other five groups and from each other.

@ Four cases were excluded for the duration of their illness could not be calculated accurately.

Group A : duration of illness varies from 6 months to less than 5 years.

Group B : duration varies from 5 to 10 years.

Group C : duration varies from more than 10 years to 15 years.

Group D : duration was more than 15 years.

The following statistical procedures were used to analyze the various data obtained in this study :

(1) Single factor analysis of variance (ANOVA).

(2) The least significant difference (LSD).

(3) The z ratio.

RESULTS

The Word Meaning Test :

The results of the word meaning test in relation to the **activity dimension** show a greater discrepancy among the studied cases (Table 1). Tests of significance have shown a number of differences among the five groups (Table 2). The majority of these differences revolve around group V. The latter presented the maximum evidence of disorganization of the personality and was composed mostly of hebephrenic cases. Group V patients show significant impairment in the conceptualization of the meaning of words than groups I and IV significantly impaired emotional resonance than groups II,III and IV, significantly impaired volitional readiness than all the other groups and significantly less consensual responses than groups I and III. On the other hand, group V patients show significantly less fanatic responses than groups II and IV, and more unspecified responses than group II.

The finding that groups I and III show an apparent similarity in their scores on clinical assessment of thought disorder (Rakhawy et al., 1983) is contradicted by the results of the word meaning test. The latter shows that group III schizophrenics are significantly more im-

paired in their conceptualizationion of the meaning of words than group I schizophrenics ($P < 0.001$). Group I schizophrenics are also significantly less impaired in their conceptualization of words than groups II and IV, and they are less impaired than group II in relation to volitional readiness. They give significantly lesser unspecified responses than group II schizophrenics. In relation to group III, group II gives significantly less consensual responses and significantly more fanatic responses. Both egocentric responses and disorganized responses were non-differentiating among the five groups.

TABLE I

Word Meaning Test : Frequency of Responses

(Patients are grouped according to the activity dimension)

	group I		group II		group III		group IV		group V	
	No	%	No	%	No	%	No	%	No	%
Conceptualization										
Appropriate concept.	9	50	1	7.89	–	–	10	16.13	2	2.11
Impaired concept.	9	50	13	92.11	17	100.00	52	83.87	93	97.89
Total	18	100	14	100.00	17	100.00	62	100.00	95	100.00
Emotional resonance										
Appropriate emot. res.	6	42.86	19	63.33	11	68.75	20	48.78	9	19.15
Impaired emot. res.	8	57.14	11	36.67	5	31.25	21	51.22	38	80.85
Total	14	100.00	30	100.00	16	100.00	41	100.00	47	100.00
Volitional readiness										
Appropriate vol. read.	9	64.29	7	26.92	8	50.00	18	40.00	4	8.16
Impaired vol. read.	5	35.71	19	73.08	8	50.00	27	60.00	45	91.84
Total	14	100.00	26	100.00	16	100.00	45	100.00	49	100.00
Overall assessment										
Consensual resp.	4	26.67	2	7.69	5	31.25	5	11.11	2	4
Egocentric resp.	5	33.33	13	50.00	7	43.75	22	48.89	19	38
Fanatic resp.	—	—	9	34.62	1	6.25	11	24.44	1	2
Disorganized resp.	1	6.67	—	—	1	6.25	—	—	13	26
Unspecified resp.	5	33.33	2	7.69	2	12.50	7	15.56	15	30
Total	15	100.00	26	100.00	16	100.00	45	100.00	50	100

TABLE II

Word Meaning Test : Distribution of Statistical Significance
(Patients are grouped according to the level of activity)

	Group	I	II	III	IV
Conceptualization.	II	−2.55*			
	III	−3.38****	1.23		
	IV	−2.97***	0.79	1.77	
	V	−6.28****	−1.23	0.61	−3.23***
Emotional Resonance.	II	1.28			
	III	1.43	0.37		
	IV	0.38	−1.22	−1.36	
	V	−1.81****	−3.99****	−3.68**	−2.95***
Volitional Readiness.	II	−2.30*			
	III	−0.79	1.52		
	IV	−1.57	1.11	−0.69	
	V	−4.58****	−2.19*	−3.57****	−2.70**
Consensual Responses.	II	1.66			
	III	−0.28	−1.99*		
	IV	1.46	−0.48	1.87	
	V	2.66**	0.68	3.08***	1.32

TABLE II (cont.)

Fanatic Responses.	II	——			
	III	——	2.10*		
	IV	——	0.92	–1.57	
	V	——	3.99****	0.86	3.29****
Egocentric Responses.	II	–1.04			
	III	–0.60	0.40		
	IV	–1.05	0.09	–0.35	
	V	–0.33	1.06	0.39	1.07
Disorganized Responses	II	——			
	III	0.05	——		
	IV	——	——	——	
	V	–1.60	——	–1.68	——
Unspecified Responses	II	2.10*			
	III	1.39	–0.52		
	IV	1.49	–0.96	–0.30	
	V	0.25	–2.21*	–1.39	–1.67

** Statistical significance (P ◂ 0.001)
*** Statistical significance (P ◂ 0.005)
**** Statistical significance (P ◂ 0.001)

The results of the word meaning test grouped in relation to the duration of the illness are illustrated in Table 3. Statistical analysis of these data is illustrated in Table 4. Group A differs from all other groups with a longer duration of illness in having lesser impairment in the conceptualization of words. It also differs from groups B and C in having lesser impairment of volitional readiness. Along the latter dimension group A is less impaired than group D with the longest duration of illness, but the difference is not statistically significant. Group B differs significantly from group C in giving more egocentric responses and significantly less disorganized responses. Lastly, group B differs significantly from group D in giving less consensual responses. All the other differences between the four groups are statistically non-significant.

TABLE III

Word Meaning Test : Frequency of Responses

(Patients are grouped according to the duration of illness)

	group A 6 mon – < 5y		group B > 5y – 10y		group C > 10y – 15y		group D > 15y	
	No.	%	No.	%	No.	%	No.	%
Conceptualization								
Appropriate concept.	9	29.03	4	6.35	11	13.25	1	5.56
Impaired concept.	22	70.97	59	93.65	72	86.75	17	94.44
Total	31	100.00	63	100.00	83	100.00	18	100.00
Emotional resonance								
Appropriate emot. reson.	11	47.83	24	57.14	24	51.06	9	56.25
Impaired emot. reson.	12	52.17	18	42.86	23	48.94	7	43.75
Total	23	100.00	42	100.00	47	100.00	16	100.00
Volitional readiness								
Appropriate vol.read.	13	56.52	12	26.67	13	26	7	46.67
Impaired vol. read.	10	34.48	33	73.33	37	74	8	53.33
Total	23	100.00	45	100.00	50	100	15	100.00
Overall assessment								
Consensual resp.	5	20.83	3	6.67	6	12	5	31.25
Egocentric resp.	8	33.33	25	55.56	17	34	7	43.75
Fanatic resp.	1	4.17	10	22.22	9	18	1	6.25
Disorganized resp.	3	12.5	1	2.22	10	20	—	—
Unspecifed resp	7	29.17	6	13.33	8	16	3	18.75
Total	24	100.00	45	100.00	50	100	16	100.00

TABLE IV

Word Meaning Test : Distribution of Statistical Significance

(Patients are grouped according to the duration of illness)

	group	A	B	C	D
Conceptualization	B	–2.99***			
	C	–1.97*	1.36		
	D	–1.97*	–0.12	0.19	
Emotional Resonance	B	0.72			
	C	0.25	–0.57		
	D	0.52	–0.06	0.36	
Volitional Readiness	B	–2.42*			
	C	–2.53*	–0.07		
	D	–0.59	1.44	1.52	
Consensual Responses	B	1.75	–0.89		
	C	1.00			
	D	–0.75	–2.50*	–1.80	
Egocentric Responses	B	1.76			
	C	–0.06	2.11*		
	D	–0.67	0.81	–0.71	
Fanatic Responses	B	–1.95			
	C	–1.63	0.51		
	D	–0.30	1.43	1.14	
Disorganized Responses	B	1.74			
	C	–1.14	–.70**		
	D	——	——	——	
Unspecified Responses.	B	1.60			
	C	1.32	–0.73		
	D	0.75	–0.53	–0.26	

The Free Verbalization Interview :

The results of the different manifestations of thought disorder through a free verbalization interview, according to the activity dimension, are presented in Table 5. Only one measure showed a statistically significant difference among the five groups, namely overall deviant verbalizations. This measure is an index of the rater's overall opinion as to the deviance of the presented sample of speech from normal speech. On this measure groups I and IV scored significantly better than group V subjects (Table 6). This finding is corroborated by the fact that group V subjects actually scored highest on four other measures of deviant speech (gap in communication, private meaning, vagueness and overall assessment of looseness of associations).

The results of the free verbalization interview grouped in relation to the duration of the illness are illustrated in (Table 7). The differences among the four groups on all measures are statistically nonsignificant. Again, there are no demonstrable trends towards either increase or decrease of one or the other manifestation of thought disorder with increasing duration of the illness.

TABLE V

Free Verbalization Interview: Mean Scores on Various Measures of Deviant Speech Patterns and Results of ANOVA Test (Patients are grouped according to the level of activity)

	I N = 2	II N = 3	III N = 4	IV N = 3	V N = 6	ANOVA test
Gap in communication	0.50	1.33	2.00	1.00	2.33	1.90
Private meaning	0	0	0	0	0.83	—
Delusional thinking	0	0.67	0.50	1.67	1.00	0.73
Vagueness	1.00	2.00	2.00	1.67	2.33	1.01
Abrupt time shifts	0.50	1.00	0	0	0.83	0.15
Repetition	0.50	1.33	2.00	2.33	1.83	1.23
Perseveration	1.50	2.67	1.50	1.33	1.83	0.68
Number of words (paucity)	47	139	142.5	260.33	145.17	1.68
Overall deviance	4	4.67	5	4.33	5.83	3.49*
Sum of Ls	37.75	21.28	46.01	22.12	46.55	0.61

* Statistical significance ($P < 0.05$)

Ls = Final scores for various categories of loose association.

TABLE VI

Free Verbalization Interview : Distribution of Statistical Significance on Overall Deviance

(According to the level of activity)

	I N=2 X=4	iI N=3 X=4.67	III N=2 X=5	IV N=3 X=4.33	V N=6 X=5.83
II	0.67				
III	1.00	0.33			
IV	0.33	0.34	0.67		
V	1.83*	1.16	0.83	1.5*	

X = mean score

* P < 0.05

TABLE VII

Free Verbalization Interview : Mean Scores and Results of ANOVA Test

(According to the duration of illness)

	A ½y-5y N=3	B ▸5y-10y N=3	C ▸10y-15y N=6	D ▸15y N=2	ANOVA test
Gap in communication	1.00	2.00	1.00	2.00	0.48
Private meaning	1.00	0	0.67	0	—
Delusional thinking	0.67	0.67	1.33	0	2.18
Vagueness	1.67	1.67	1.50	3 00	1.33
Abrurpt time shifts	0.33	0.33	1.00	0	—
Repetition	1.00	2.00	2.00	2.00	0.79
perseveration	1.33	1.67	2.50	2.00	0.97
Number of words (Paucity)	60	108	194.5	217.5	2.55
Overall Deviance	4.67	5.00	5.17	5.5	0.31
Sum of Ls	40.67	35.95	19.85	24.60	1.10

The differences are statistically non-significant.

Ls = Final scores for various categories of loose associations represent incidence of looseness of associations per 1000 words.

DISCUSSION

Using the new trend of subdividing the schizophrenics on the bases of individual difference constructs (Neale and oltmanns, 1980), subjects in our sample were grouped respectively according to the level of activity of the schizophrenic process and the duration of the illness. The verbal responses to the two clinical tools, namely the word meaning test and the free verbalization interview were analyzed in accordance with the two previously mentioned varriables.

The Activity Dimension :

Similar to the clinical assessment (Rakhawy et al., 1983), the present study of the manifestations of thought disorder in relation to the activity dimension has yielded a large number of significant findings. In this context both the word meaning test and the free verbalization have been revealing as regards the phenomenon of thought disorder, with the first one giving more significant results. Moreover, interpreting the results of both tests in relation to each other has been helpful as regards the elucidation of meaningful data.

Group I

As it has been demonstrated in the results of the clinical assessment and the proverb test (Rakhawy et al., 1983), the analysis of data has shown the trend that group I patients stand in polar opposition with group V; group I presents the least evidence of thought disorder while group V shows the most direct and frequent manifestations of thought disorder.

Group I differs significantly from all other groups in that it presents the least degree of impaired conceptualization of the meaning of words. Also, group I is significantly less impaired than groups II and V as regards the degree of volitional readiness. These findings seem to reflect their early degree of psychopathology; they represent a starting stage of split with equivalence of forces between the split parts. This latter seems to lie at the origin of duality that colours the clinical picture, whereas equivalence of forces between the split parts seems to

determine the liveliness of experience as lived by the patients at this stage.

Group I is formed of one case of incipient schizophrenia and one case of schizo-affective schizophrenia. Both diagnostic categories have been removed from the group of schizophrenic disorders in a recent, purely descriptive nosological discipline (DSM-III, 1980). When our results are considered at their face value they seem to be in accordance with such an attitude. However, many authors seem to agree that a starting schizophrenia is not expected to manifest by discrete clinical symptoms. The change is probably wholistic and global; what Rakhawy (1979) has described as a change in the basic central idea or, in Bernes language (1961), a change in the life script. In the same line, Arieti (1974) has stated that early in schizophrenia a patient may show an unusual or abrupt change in attitude towards his interests whether it is the kind of study, profession or his usual behavior as a whole. Accordingly, such concealed changes would not be expected to manifest overtly in the patients responses to the clinical tools.

Groups II & IV

Group II presents no significant difference from group IV on any measure of thought disorder. This finding immediately suggests that the existence of these two groups as separate entities is doubtful. Symptoms of loss of ego boundaries and Schneider's first rank symptoms (group II) may be considered as integrative to the personality in the same manner of paranoid delusions (group IV). Symptoms of loss of ego boundaries like thought broadcasting, thought withdrawal, and thought insertion (Lehmann, 1980) are actually included in DSM-III under the rubric of delusions. They are also described under the heading of delusions by Wing et al. (1974).

Group II gives significantly less consensual responses to the meaning of words than group III. Such finding implies that group III exhibits a lesser degree of abnormality in conceptual thinking. However, it may be that adaptation at a lower level that is characteristic of this group conceals the lack of agreement between the different aspects of

the meaning of a word. If a patient belonging to the latter group is exposed to an increased amount of mental strain with which he is unable to cope we may expect the resurgence of more manifestations of dissonance at the level of conceptual thinking.

As Tables 2&6 illustrate, group IV shows a number of significant differences from group V. These differences give the impression of a second polarity different from the one between group I & group V. However, the polarity here does not consist of one group with minimal appearance of thought disorder, and one with maximal appearances. Here the polarity is between two groups each of which presents manifestations of thought disorder though of a different pattern.

Group IV simulates group I in their lowering scoring of thought prosess disorder (Rakhawy et al., 1983). Again, if delusions are put aside, we may notice that group I does not differ from group IV except on the measure of impaired conceptualization of the meaning of words. This indicates that the word meaning test may be a sensitive tool in tapping smaller differences in thought disorder. This agrees with the finding of Helmy (1980) as regards the lack of substantial differences between early and paranoid schizophrenics on various psychometric tests.

Group III

In the clinical assessment of thought disorder, group III has exhibited a superficial similarity with group I; the only significant finding differentiating both groups was the higher degree of thought process disorder (Rakhawy et al., 1983). In this study, the results demonstrate a number of instances that may contradict this view. These instances are apparent in the significantly higher impairement of conceptualization of the meaning of words than group I (Tables 1&2), and in the finding that there is no significant difference on the same coding category between group III and either of groups II and V. Moreover, the free verbalization interview, being the least structured clinical tool, could elucidate in this group more the presence of thought disorder. This is apparent when we consider that whereas group IV and group I differ

significantly from group V on the measure of overall deviant verbalization, group III has no such difference indicating a high score on such a measure (Table 6).

The significantly lesser degree of impaired emotional resonance and impaired volitional readiness as well as the higher incidence of consensual responses in group III than group V (Table 2) may reflect a different degree of severity of psychopathology.

Group V

Group V presents the most straight forward evidence in relation to manifestations of thought disorder. They represent a homogeneous group that corresponds to Kraepelin's mother concept of schizophrenia,

The majority of indices studied in the free verbalization sample have proved non-significant in relation to the activity dimension. It is possible that these non-significant indices constitute what is common to most schizophrenics, regardless of the level of activity.

Lastly, it seems that the activity dimension merits further consideration in future research. What we can say for now is that schizophrenics could be grouped in an order that includes a group with erupting psychotic activity that is mostly within control, a group in whom concepts have become simply poor in form and content, a group in whom the activity is controlled and expressed by integrative delusions, and a group in whom psychotic activity has established a permanent disorganized state - groups I, III, II & IV, and V respectively (see also Rakhawy et al., 1983).

Thought disorder and the Duration of Schizophrenia :

Statistical analysis of the scores of our sample according to the duration revealed largely negative findings. It is possible that a more refined methodology may elaborate the differences along the temporal dimension in schizophrenia. For the time being, it was found that the manifestations of thought disorder and the duration of schizophrenia did not correlate positively with each other. Manifestations of thought

disorder appear to be much more dependent on the activity dimension than on the duration of the illness.

CONCLUSIONS

1 – An unstructured free verablization sample is an important additional clinical tool that may serve to elucidate the manifestations of thought disorder in a supposedly schizophrenic subject.

2 – Giving the meaning of equivocal words could serve as an important supplementary tool to the clinician like the proverb test. However, the introduction of such a test awaits further standardization.

3 – Since schizophrenia could be viewed as a disease process, it is conceivable that a study of the various phases in terms of activity of this process may help in understanding the variations in the manifestations of thought disorders.

4 – It seems that the duration of the illness in schizophrenia is not simply correlated with severity, chronicity, or disorganized thought processes. It is possible that schizophrenia reflects a disease process that could reach a certain state of disorganized thought processes in different paces of time.

REFERENCES

American Psychiatric Association (1980) **Diagnostic and Statistical Manual of Mental Disorders.** (3rd edition). Washington: The Association.

Amin, Yousreya (1982) **Clinical and Psychometric Assessment of Disturbance of the Process and Content of Thought in Egyptian Schizophrenic Patients.** Unpublished M. D. Thesis. Cairo University.

Arieti, S. (1974) **Interpretation of Schizophrenia.** London: Grosby Lockwood Stables.

Berne, E. (1961) **Transactional Analysis in Psychotherapy.** New York: Grove Press Inc.

Egyptian Psychiatric Association (1975) **The Diagnostic Manual of Psychiatric Disorders (DMP-I).** Cairo: The Association.

Helmy, L.A. (1980) **A Study of Formal Thought Disorder in Different Types of Schizophrenia: A Descriptive and Explorative Study.** Thesis In Fulfillment of the Master Degree in Psychology. Ain Shams University. (In Arabic).

Lehmann, H.E. (1980) Schizophrenia: Clinical Features. In Kaplan, H.I., Freedman, A.M. and Sadock, B.J. (eds.), **Comprehensive Textbook of Psychiatry.** 3rd Ed. Vol. I. Baltimore: Williams and Wilkins.

Mahfouz, R. (1977) **Cross-National Study of the Symptomatology of Schizophrenia:** An Anglo-Americo-Egyptian Comparison. Cairo: Dar El-Ghad.

Neale, J.M. and Oltmanns, T.F. (1980) **Schizophrenia.** New York: John wiley and Sons.

Rakhawy, Y.T. (1979) **A Study in Psychopathology. Cairo: Dar El-Ghad** (In Arabic).

———— Amin, Y., Hamdi, E., Mahfouz, R. and Howaidi, M. (1983) Thought disorder in schizophrenia, Relation to activity and temporal dimensions. **Egypt. J. Psychiat., 6:** 76—99.

Reilly, F., Harrow, M. and Tucker, G. (1973) Language and thought content in acute psychosis. **Am. J. Psychiat, 130:** 411—417.

———— Harrow, M., Tucker, G., Quinlan, D. and Siegel, A. (1975) Looseness of associations in acute schizophrenia. **Brit. J. Psychiat, 127:** 240—246.

Siegel, A., Harrow, M. Reilly, F. and Tucker, G. (1976) Loose associations and disordered speech pattern in chronic schizo-

phrenia. Journal of Nervous and Mental Disease, 162: 105—112.

Sullivan, H.S. (1925) Peculiarity of thought in schizophrenia. Am. J. Psychiat., 82: 21—86.

Weintraub, W. and Aronson, H. (1965) The application of verbal behavior analysis to the study of psychological defense mechanisms: III Speech pattern associated with delusional behavior. Journal of Nervous and Mental Disease, 141: 172—179.

AUTHORS

Y.T. Rakhawy, M.D., M.R.C.P., D.P.M. & D.M., Professor of psychiatry, Psychiatric Department, Cairo University, Cairo.

Y. Amin, M. Sc. (P.M. & N.), Dar El-Mokattam for Mental Health.

E. Hamdi, M.D., M.Sc. (P.M. & N.), Lecturer, Psychiatric Department. Cairo University.

R. Mahfouz, M.D., M.Sc. (P.M.&N.), D.M., Director, Dar El-Mokattam for Mental Health.

M. Howaidi, PH. D., Researcher in Clinical Psychology, the National Centre for Social and Criminological Research, Cairo.

الموجـــــز

اضطراب التفكير فى الفصام وعلاقته بالبعد الزمنى وبعـد النشـــاط (الجزء الثانى)

فى هذه الدراسة تم تحليل محتوى استجابات عشرين مريضا فصاميا على اختبار « معانى الكلمات » واختبار « العينة الكلامية الحرة » ، وذلك لتقويم الأشكال المختلفة لاضطراب التفكير عند هؤلاء المرضى . وقد تم تحليل النتائج احصائيا وفقا لبعدين هما « بعد النشاط » و « البعد الزمنى » . ولقد أوضح ذلك أن الارتباط بين بعد النشاط وبين شدة اضطراب التفكير دال بدرجة كبيرة ، فى حين لم تكن هناك نتائج دالة وثابتة بالنسبة لارتباط

لشدة الاضطراب والبعد الزمنى . وعلى ذلك يبدو من تلك الدراسة أن الأزمان يعتمد على بعد النشاط أكثر من اعتماده على فترة المرض . كما بينت الدراسة فاعلية اختبارى « معانى الكلمات » و « العينة الكلامية الحرة » فى الكشف عن اضطراب التفكير .

ABSTRAIT

Les Troubles de la Pensée

Chez les Schizophrénes et leur relation au Facteus

de l'Activité et de la Durée de la Maladie·II

Les réponses transcrites de 20 malades schizophrènes à une entrevue de discours libre et au test concernant le sens des mots ont été soumises à une analyse du contenu. De différentes variables du trouble de la pensée ont été evaluées dans chaque épreuve. Les résultats obtenus ont été analysés respectivement selon la dimension temporelle et le facteur de l'activité de la maladie. La correlation entre la dimension de l'activité et la gravité des troubles de pensée a été hautement significative. Cependant, il n'y pas eu de résultats significatifs concernant la la durée de la maladie schizophrène. La chronicité apparait dépendre beaucoup plus de la dimension d'activité que celle de la durée de la maladie. D'ailleurs, les deux épreuves ont prouvé d'être utiles pour cribler les troubles de la pensée.