

## THE P.S.E. & SOCIAL SKILLS OF CHRONIC SCHIZOPHRENICS : DESCRIPTION & CORRELATIONS

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### Abstract

DSM III referenced chronic schizophrenics were examined by the Present State Examination, ARGYLE's Relationship Rules and Behavior Analysis of Susan Spence.

The P.S.E. profile is similar to the (S) Schizophrenic Profile of the I.P.S.S. and US/UK with some features from (P) Paranoid Psychoses and other psychoses (O) profiles.

The Nuclear schizophrenic group showed higher figures of deficit in brother-sister relationship, questions asked, eye contact and total P.S.E. Scores than the non-nuclear schizophrenics. Multiple correlations could be demonstrated between the social skills components and psychiatric symptoms. Factor analysis on a larger sample is recommended.

### Introduction

Social skills are defined in different ways by different researchers out of emphasis on one aspect or another, rather than out of any discrepancy in meanings. Liberman et al. (1979), listed 3 dimensions of social skills:

1. Discrete non-verbal behaviors,
2. Content of speech in conversation, and
3. Reciprocity in communication.

The non-verbal elements of social behavior include the face, gestures, gaze, spatial behavior, bodily contact, non-verbal aspects of speech and appearance.

The verbal elements of social behavior include instructions and directions, questions, comments and suggestions, social routines e.g. greetings, expressing emotional states and latent messages: (Ekman & Freisen 1975)., (Ekman & Freisen 1969),(Argyle and Cook 1976), (Kendon 1973), Argyle 1975), (Mehrabian 1972) and (Austin 1962).

Schizophrenics suffer from every possible kind of social skills deficit. Some are common to several kinds of patients, but some were distinctive of schizophrenia. The fundamental core of these social skill failures may lie in the cognitive of physiological spheres and not in the social processes (Argyle 1981).

The aim of this work is:

- (1) to describe and quantify the psychopathology of chronic schizophrenics using the Present State Examination (P.S.E.) symptom and syndrome profiles,
- (2) to describe and quantify some verbal and non-verbal elements of the same patients' social skills, and
- (3) to look into the statistical correlations between the psychopathology and social skill scores in search for common mechanisms.

#### **METHODOLOGY**

**Material:** All schizophrenic patients admitted to a short stay psychiatric hospital satisfying all the following Criteria: D.S.M. III criteria, history of illness over 3 years, history of repeated admissions, age less than 40. They amounted to 32 patients. Their sociodemographic and identity characteristics showed they were rather a homogenous group with the prototype of a male in his thirties, single, fairly educated, employed, coming from a large family. Mean history of illness around 10 years and mean number of admission episodes around 5.

**Tool:**

1. The Present State Examination (P.S.E.) full version 140 symptom of Wing et al. using the Cairo dialect version of OKASHA and ASHOUR, 1979.
2. Argyle's Relationship Rules: It is a questionnaire to show how far an individual embarks upon the

necessary social rules while interacting with significant others such as brothers, sisters, parents, friends etc. Only three significant rules were considered in this study namely:

- The Brother-Sister of similar age, Parent-Adolescent Child Relationship, and close friends of the same sex.
- Adaptation and Translation into Cairo Arabic Dialect was done by ASHOUR & HUSSEIN, 1982.

The reliability of the Arabic Argyle's questionnaires were determined by Split Half method and expressed after correlation by Spearman-Brown Formula as:

Brother-Sister of same = 0.98

Parent-Adolescent-Child = 0.94

Close friends of same sex = 0.70

3. Susan Spence's Behavioral Analysis:

- The subject of analysis was 13 items of verbal and non-verbal behavior of the patient in a sample time of 10 minutes during a standard semi structured videotaped conversation setting. The conversation topics were work and leisure activity and permission of the patients was taken for videotaping and the machinery was apparant to them. Five minutes of acclimatization was done before sampling.
- The behavioral variables obtained high inter-rater reliabilty and were classified into 2 groups:-  
(1) Discrete behavioral events that needed an event recorder e.g. gestures, gross body movements, appropriate head movements, dysfluencies, attention feed-back responses, interruptions, questions asked, and initiations. The behavior was scored as number per minute (n°/min). (2) Non-discrete responses needing measurement by a cummulative stop-watch e.g. fiddling, smiling, eye contact, amount spoken, and latency of response; the behavior was scored as second per minute (S/min).

## Results

1. The P.S.E. Symptom Profile of the Patients:

It is a crude form of describing the psychopathology. Out of the profile of our patients we will enlist here the more prevalent symptoms in descending order of frequency:

| <u>Symptom No.</u> | <u>Symptom level</u>        | <u>Prevalence %</u> |
|--------------------|-----------------------------|---------------------|
| 107                | Social Impairment Psychotic | 100                 |
| 104                | Insight psychotic           | 96.8                |
| 20                 | Poor concentration          | 78.1                |
| 74                 | Delusion of persecution     | 75                  |
| 93                 | Systematization             | 75                  |
| 28                 | Social withdrawal           | 72.1                |
| 31                 | Simple ideas of reference   | 72.1                |
| 35                 | Delayed sleep               | 72.1                |
| 40                 | Irritability                | 61.3                |
| 8                  | Restlessness                | 56.6                |
| 4                  | Worrying                    | 53.6                |
| 30                 | Lack of confidence          | 41.8                |
| 22                 | Loss of interest            | 53.1                |
| 19                 | Inefficient thinking        | 43.74               |
| 96                 | Acting out                  | 43.7                |
| 128                | Blunted affect              | 43.7                |

#### **P.S.E. Syndrome Profile and Check List:**

It is a further logical clinical and statistical data-reduction stage for more easy comprehension and consideration of information in the P.S.E. 38 Syndromes can be derived from the 140 PSE Symptoms and their names which are symbol-mnemonics have diagnostic implications. The rules of making the syndrome checklist are straightforward but conservative.

The syndrome profile of our subjects is shown in figure (1). Figure (2) describes syndrome profiles class S (Schizophrenic Psychoses) of the broad categories of Wing et al. obtained in the IPSS (International pilot study of schizophrenia of the W.H.O) and the U.S.-U.K. Study Profiles. There are differences between the 3 profiles constructed by the same standardized highly reliable tool. One has to search for the reasons in the relationship between the DSM III criteria which guided the choice of our cases and the criteria precedent to it which guided the I.P.S.S. and US-UK workers.

Other sources for the discrepancies between our profile and the two others may lie in the chronicity of our patients.

On the whole it is quite clear that our chronic schizophrenics show lower percentage of Nuclear Syndrome, Auditory hallucinations, Affective flattening, Slowness and Simple depression. Otherwise they follow the same profile as the I.P.S.S. and U.S./U.K. Schizophrenic process profiles.

Another way of presenting our results is to list the PSE syndromes prevalence in our sample in a descending order of frequency.

**Non-specific psychosis:**

|                                         |       |
|-----------------------------------------|-------|
| Non-specific psychosis                  | 90.6% |
| Social unease                           | 81 %  |
| Loss of interest                        | 81 %  |
| Delusions of Persecution                | 75 %  |
| Slowness                                | 75 %  |
| Delusions of reference                  | 69.5% |
| Tension                                 | 66.4% |
| Sexual and phantastic delusions         | 66.4% |
| Nuclear syndrome                        | 53.6% |
| Irritability                            | 52 %  |
| General anxiety                         | 46.9% |
| Simple depression                       | 46.9% |
| Grandiose and religious delusions       | 45.7% |
| Affective Flattening                    | 43.7% |
| Depressive delusions and hallucinations | 28.1% |
| Hysteria                                | 18.7% |
| Residual syndrome                       | 15.6% |
| Obsessional neurosis                    | 12.5% |
| Hypomania                               | 9.3%  |
| Auditory hallucinations                 | 9.3%  |
| Incoherent speech                       | 6.2%  |
| Catatonic syndrome                      | 3.1%  |
| Other symptoms of depression.           |       |

**Argyle's rules of relationship:**

1. The intercorrelations between the variables of Argyle's scales: It was calculated to probe adjustment in relationship.

The significant relationship was between brother-sister of same age and close friends of the same sex ( $P < 0.05$ ) the other intercorrelations are not statistically significant.

Such a result indicates that Brother-Sister of same age and close friends of same sex relationships represent a type of relationship different from that governs Parent Adolescent child relationship.

## 2. The correlation between the PSE symptoms and Argyle's Relationships rules:

Highly statistically significant correlations could be found between the following ( $P < 0.01$ ):

- Argyle's Brother sister of similar age and PSE symptoms of social impairment psychotic, insight neurotic and delusional explanation.
- Argyle's parent adolescent child relationship and PSE symptoms of anxiety due to delusions, social impairment psychotic, and anxious foreboding.
- Argyle's close friends of the same sex and PSE symptoms of social impairment psychotic and social withdrawal.
- At a lower level of significance ( $P < 0.05$ ), each relationship again showed correlation with some more P.S.E. symptoms e.g.
- Argyle's brother sister of similar age and PSE symptoms of neglect due to brooding and incoherent speech.
- Argyle's parent adolescent child relationships and PSE symptoms of delusions of control, tension pains, pathological guilt, suicidal plans, hypochondriasis, restlessness, delusional mood and restricted quantity of speech.
- Argyle's close friends of the same sex relationship and PSE symptoms of Anergia, retardation, preoccupation, flight of ideas, obsessional checking and repeating and delusions of depersonalization.

## The Raw Scores of the Patients' Scores Argyle's Relationship Rules:

|    |                               |          |            |
|----|-------------------------------|----------|------------|
| a. | Parent-Adolescent-child       | = 113.87 | S.D. 27.75 |
| b. | Brother sister of similar age | = 101.15 | S.D. 22.11 |
| c. | Close friends of same sex     | = 100.5  | S.D. 22    |

### Susan Spence's Behavioral Analysis Variables:

#### 1. The inter correlation between the variables of Susan Spence:

There were a lot of positive correlation e.g. between gestures and dysfluency, gross body movements and interruptions, smiling and interruptions; appropriate head movements and questions asked; appropriate head movements and dysfluency, eye contact, and amount spoken.

There was also a lot of significant negative correlations between variables e.g. gross body movements and dysfluency; smiling and dysfluency; eye contact and latency of response amount spoken and gross body movement; amount spoken and latency of response.

#### 2. Interrelation between the behavioral variables and PSE symptoms:

The highly statistically significant correlations were between:

Gestures and Delusions of Catastrophe, Social Impairment psychotic and thought echo.

Fiddling and slowness of speech, gross body movements and restlessness, anxious due to delusions and depersonalization.

Smiling and social impairment psychotic, restricted quantity of speech and delusions of grand

Appropriate head movement and simple ideas of reference, social impairment psychotic and obsessional checking, repeating.

Eye contact and social impairment psychotic and distractability.

Dysfluency and social impairment psychotic.

Attention feedback and flight of ideas, social impairment psychotic and delusion of depersonalization.

Amount spoken and delusions of persecution delusional explanation

Anxiety due to delusions and social impairment psychotic.

Questions asked and social impairment psychotic.

Latency of response and social impairment psychotic, obsessional ideas and ruminations.

**The raw scores of verbal and non-verbal behavior analysis of the patients:**

|                                      |                      |
|--------------------------------------|----------------------|
| 1. Gestures (n/m)                    | = 5.156, S.D. 4.57   |
| 2. Fiddling (s/m)                    | = 15.92 , S.D. 17.32 |
| 3. Gross body movement (w/m)         | = 0.82 , S.D. 1.77   |
| 4. Smiling (n/m)                     | = 0.64 , S.D. 0.41   |
| 5. Appropriate head movement(n/m)    | = 1.27 , S.D. 1.5    |
| 6. Eye contact (s/m)                 | = 24.04 , S.D. 8.8   |
| 7. Dysfluencies (n/m speech)         | = 1.15 , S.D. 0.73   |
| 8. Attention Feedback Responses(n/m) | = 0.03 , S.D. 0.05   |
| 9. Amount spoken (s/m)               | = 34.18 , S.D. 12.02 |
| 10. Interruption (n/m)               | = 0.034, S.D. 0.059  |
| 11. Questions asked (n/m)            | = 0.056, S.D. 0.082  |
| 12. Interruptions (n/m)              | = 0.093, S.D. 0.178  |
| 13. Latency of response (s/response) | = 3.687, S.D. 1.356  |

**Nuclear Versus Non-Nuclear Patients:**

The 32 patients constituted 17 patients with the nuclear syndrome and 15 without the nuclear syndrome. They were contrasted as the Argyle's Relationship rules and the behavioral analysis of Susan Spence.

They differed in Brother-sister of same age relationship deficit, questions asked, eye contact and total PSE score. All three were statistically significantly higher in the nuclear group.

**Discussion**

This is the first study of Egyptian schizophrenics with such standardized and reliable tools as the PSE, Argyle's relationship rules and, Behavioral Analysis of Susan Spences. The figures obtained are descriptive and quantifies these molecular psychiatric, social and psychological variables.

Profiles constructed from these distinct variables gives a detailed picture of the schizophrenics psychopathology and social skills.

These profiles if repeated can help in guiding treatment and monitoring the evolution of the schizophrenic process. Social skills training can also be evaluated by such profiles. The check lists

of symptoms and syndromes in our chronic schizophrenics nicely describes that the major disability of these patients is social incompetence. The prevailing symptoms and syndromes are non-specific psychotic and neurotic ones. The nuclear schizophrenic syndrome is present only in half of the cases and this nuclear half does not seem to be more particularly disabled than the other non nuclear half.

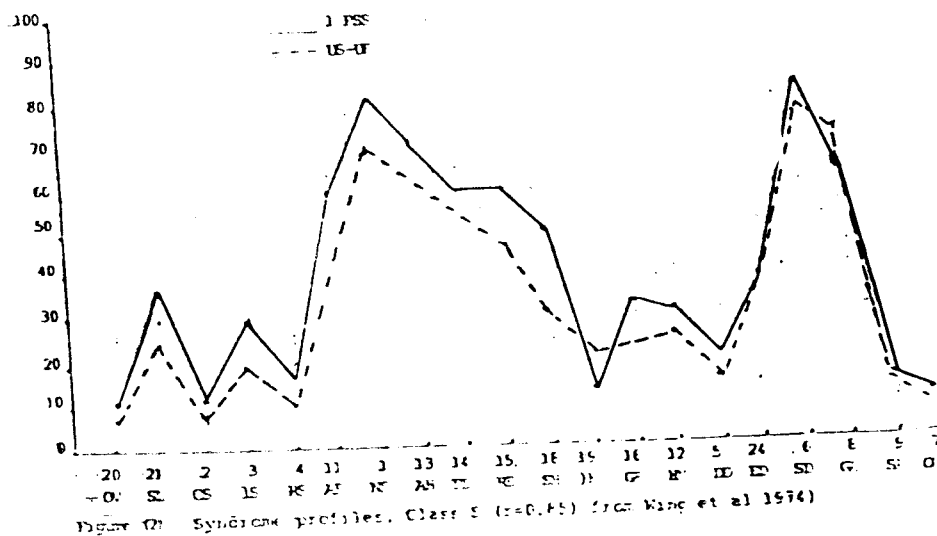
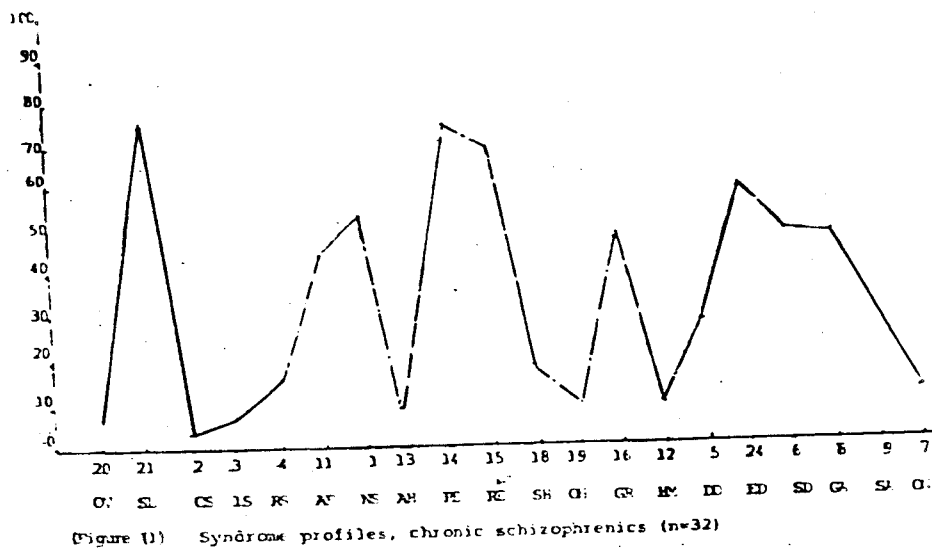
The methodology used allows us, for the first time in Egypt, to compare our results to those of the IPSS and US/UK studies. Because we adhered to DSM III criteria our schizophrenic groups' syndrome profile did not part from the general configuration of the S profile of schizophrenic psychoses in the Catego system of Wing et al., 1974 derived from the IPSS and US/UK projects. When it comes to schizophrenia there is high correlation between the criteria in major systems of classification.

Our profile differs from the S (schizophrenic psychoses) profile by less nuclear syndrome, less auditory hallucinations and less effective flattening. In this respect our profile is closer to the profile (P) (paranoid psychosis) which accounts for all psychoses other than schizophrenic, manic and depressive psychoses. But our profile has too much grandiose and religious delusions for a P profile.

In our profile the high slowness is dissimilar to both (S) and (P) profiles and looks more similar to the (O) profile (other psychoses) which is composed mainly of simple and catatonic schizophrenia. Our patients behavior in social skills molecular variables is worse than Trower's patients diagnosed as unskilled socially (Trower 1980). Eye contact is less, so is smiling and gross body movements. Our patients did not differ as regards amount spoken and gestures.

We discovered an extensive matrix of correlations between deficits in elements of social skills like adhering to the relationship rules, verbal and non-verbal behavior, and elements of psychopathology represented by PSE symptoms. This discovery should be followed by a more sophisticated factorial study.

Our results cannot contribute to answering the question whether social skill failure is primary or only secondary to mental disorders because the sample was small.



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فحص الحالة الحاضرة والمهارات الاجتماعية  
لدى الفصامين المزمنين : دراسة وصفية وارتباطات دالة  
« موجز »

تمت الدراسة على ٣٢ حالة فصام مزمن مطابقة لمواصفات الدليل  
الأمريكي الثالث لتقسيم الأمراض .

شملت الدراسة فحص الحالة الحاضرة وعمل بروفيل للأعراض وزملات  
الأعراض وتبين التشابه الكبير بين زملات الأعراض المصرية ومثيلاتها في  
الدراسة العالمية للفصام التي تقوم بها منظمة الصحة العالمية وكذلك الدراسة  
الأمريكية/الانجليزية – وتمت مناقشة أسباب الاختلاف .

شملت الدراسة كذلك اعداد وترجمة وتطبيق اختبار ارجايل لعيوب قواعد  
العلاقات الاجتماعية وتم الحصول على سلوك المرضى على هذا الاختبار .

كما شملت الدراسة تطبيق اختبار التحليل السلوكي للمهارات الاجتماعية  
اللفظية وغير اللفظية أثناء محادثة مقننة تم تسجيلها بالفيديو لكل مريض . وتم  
الحصول على معدلات سلوك المرضى المصريين على هذا الاختبار ومقارنتها  
بنتائج الباحثين الأجانب .

كما تم اكتشاف وجود علاقات احصائية متعددة بين متغيرات الحالة  
الحاضرة ومتغيرات المهارة الاجتماعية تستدعي عمل تحليل عاملي لاكتشاف  
طبيعة العلاقة بين هذه المتغيرات .

## ABSTRAIT

### LE PSE ET LES HABILITES DES SCHIZOPHRENES CHRONIQUES: DESCRIPTION ET CORRELATIONS

32 schizophrènes chroniques répondant aux critères de la DSM-III ont été examinés par le PSE (l'examen de l'état présent), les règles des relations d'Argyles et l'analyse de comportement de Susan Spence.

Le profil obtenu par le PSE était semblable au profil de la schizophrénie dans l'étude pilote internationale de la schizophrénie, ainsi qu'à l'étude des Etats Unis/Royaumes Unis avec quelques critères de la psychose paranoïde (P) et d'autres psychoses (O).

Le groupe de la schizophrénie nucléaire présentait des résultats plus élevés que le groupe de la schizophrénie non-nucléaire montrant un déficit dans la relation frère/sœur, les questions demandées, le contact des yeux et le PSE total.

Plusieurs corrélations ont été démontrées entre les constituants des habilités sociales et les symptômes mentales. Une analyse de facteur et un échantillon plus grand sont recommandés.