

## VALIDATION OF FAMILY INTERACTION PATTERNS SCALE

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### SUMMARY

A Family Interaction Patterns Scale (FIPS) consisting of 106 items pertaining to six areas of family functioning: leadership, communication, role, reinforcement, cohesiveness, social support system; was standardised by administering it to 30 neurotic depressives, 30 hysterical neurotics, 20 alcoholics and 30 normals and one of their family members. FIPS mean score for depressives, hystericals, alcoholics and normals were 243.87, 236.67, 262.75 and 133.17 respectively. The means of patient population were statistically significantly different from the normal population. There was no variation in the scores of patient and his/her family member. All six subscales of FIPS were compared between the groups. The scale had the capacity to discriminate between neurotics and normals and alcoholics. Based on these observations we feel FIPS is a valid tool to measure the quality of family functioning.

### Introduction

The role of family in the perpetuation and maintenance of mental illness is well documented in the literature. As a result of that it is commonly recognised that certain conditions of family life, especially certain forms of family interactions may predispose a family member to mental illness. Several approaches have been used to explore this area. Some of them pertaining mainly to schizophrenia have been discussed in detail by Liem (1980).

In Indian set up majority of the workers have concentrated on the structure of the family. They have observed a high correlation of mental illness with nuclear/unitary family. However, according to Dube (1970) mental illness is significantly high in joint as compared to nuclear families. According to Bhatti *et al* (1974), and Carstairs and Kapur (1976) family structure and mental illness are two independent variables. A few workers have concentrated

on the functional aspects of family (Agarwal *et al* 1978, Bhatti 1981, Sethi *et al* 1981, Channabasavanna and Bhatti 1982, Martin and Bhatti 1984, Jayashri and Bhatti 1984). Most of these studies have reported dysfunction in the families of patient population.

A few workers have used scale by Behrens *et al* (1969). Commenting on its validity in Indian Settings, Shetty and Mahal (1977) concluded that, "family interaction remains an area which retains a considerable subjectivity exercised by the observer, being an area which is extremely difficult to quantify in an objective manner". Without underestimating the contribution of all the studies which have addressed to the structure of the family, we strongly feel that in order to understand the psychopathology of mental illness it is necessary to study the patterns of family functioning. In order to have an objective assessment of family functioning an instrument is neces-

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sary. In the present work, the efforts were made to construct a family interaction patterns scale.

### Material and Methods

For the purpose of scale construction, family interactional patterns were defined as those various socio-psychological transactions occurring in the family as a system, to evolve processes for decision making, emotional expressions, and personal views, assigning tasks, and social status, enabling the family members to contribute for the growth of the family by generating morphogenesis at emotional, intellectual and social levels through the manipulation of internal and external social milieu of the family as a whole.

According to the evolutionary point of view, every family has patterns of leadership, communication, role, reinforcement, cohesiveness and social support system, which were defined as follows:

#### Leadership

A family member engaged in decision making through consensus for the growth of the family as a system is the leader of the family.

#### Communication

A process through which the family members convey their feelings, emotions and personal views.

#### Role

Socio-culturally prescribed and ascribed tasks to be performed by different family members according to their age and sex.

#### Reinforcement

Processes adopted by the family to enable the members to imbibe socially approved behaviour.

#### Cohesiveness

Processes adopted by the family for a

firm degree of mutual trust and interpersonal commitment.

#### Social Support System

Manipulation of internal and external social milieu of the family for its existence and growth.

As per our understanding, after the marriage one of the spouses is going to emerge as a leader since it is a societal expectation as well as fundamental requirement for any living system to exist. Likewise, the other functional components of a family system emerge as the family grows from one stage to another. In spite of the fact that the sequential evolutionary development of the family is; leadership, communication, role, reinforcement, cohesiveness, and social support system but we do not subscribe to the idea that the last process, for example, social support system, will not exist when family is in the first stage of evolution, i.e. leadership. Our contention is that each process of family functioning takes some specific time to get evolved and emerge as a pattern. Therefore, the structure of the family does not have any importance in the emergence of family patterns.

The source of items was the particular area. Total 106 items had the following break-up:

- I. *Reinforcement* had first 10 items, pertaining to existence of reinforcement, non existence of reinforcement, balanced reinforcement and faulty reinforcement.
- II. *Social Support System* had eleven items from 11 to 21 measuring existence and non existence of primary support, existence of both primary and secondary support, non existence of primary but existence of secondary support system, non existence of secondary support but existence of tertiary support and no support at all.
- III. *Role* had 26 items from 22 to 47 mea-

asuring role allocation, role prescription, role description, multiplicity of role, complementarity of role, role strain, role accountability and rigidity-fluidity and role.

to 73 measuring clarity, quantum, restricted, hierarchical, spontaniety, paradoxical, topic shift, switch board phenomena, critical, communication of feelings, and existence of pathways.

IV. *Communication* had 25 items from 48

V. *Cohesiveness* had sixteen items from

Table 1  
General Characteristics of the Groups

Variable	Neurotic Depression N = 30 %	Hysteria N = 30 %	Alcoholism N = 20 %	Normal N = 30 %
<b>Religion</b>				
Hindu	70	70	95	73
Muslim	17	20	-	17
Christian	13	10	5	10
<b>Age</b>				
25 - 29 years	30	27	30	27
30 - 34 years	40	43	35	43
35 - 40 years	23	27	25	23
41 - 50 years	7	3	10	7
<b>Sex</b>				
Male	53	47	100	50
Female	47	53	-	50
<b>Education</b>				
Illiterate	17	13	35	17
Primary School	47	53	20	53
Middle School	13	17	20	10
High School	13	10	25	13
SSLC	10	7	-	17
<b>Occupation</b>				
Agriculture	43	37	55	40
Skilled	10	13	40	10
Business	7	7	5	3
Housewives	40	43	-	47
<b>Income</b>				
400 Rs.	43	47	35	47
Rs. 401 - 800	23	23	40	23
Rs. 801 - 1200	10	10	15	7
Rs. 1201 - 1600	17	13	5	13
Rs. 1600 - 2000	7	7	5	10

74 to 89 pertaining to emotional, cognitive and social components of cohesiveness.

VI. *Leadership* had seventeen items from 90 to 106, pertaining to the components of existence, recognition and acceptance of leader, types of leadership, processes of leadership and leaderlessness.

Scale had four points and score varies from 106-424. The items were written in English and spoken Kannada the local language. The scores obtained in the pilot run did not show any statistically significant difference between the two versions. Therefore, both the versions were used. The items were arranged according to each sub-area.

All consecutive new cases diagnosed as neurotics and alcoholics by the psychiatric consultants during a specific period were included in the study. The scale was administered to 30 neurotic depressives, 30 hysterical neurotics, 30 normals and 20 alcoholics and one of their family members. Since there was no statistically significant difference between the patient and his/her family member and control and his/her family member, the scores of patients and

control both are used in this paper. All the four groups and their controls were matched at group level for age, sex, education, occupation income and religion (Table 1). The data was subjected to analysis of variance and median test.

The literate subjects were asked to answer each item by ticking any one of the four responses. For the illiterate subjects, the items were read out and their responses were marked.

### Results

An inspection of Table 2 demonstrates that neurotic depressives, hysterical neurotics and alcoholics had higher mean scale score as compared to normals. The differences are statistically significant. Similarly, on all the six subscales patient population had higher mean scores which were statistically significant.

Further an attempt was made to compare the four groups based on their 'T' values. Neurotic depressives had dysfunction in the areas of social support, role, communication and cohesion compared to hysterical group. Neurotic depressives had dysfunction in all the six areas when compared

Table 2  
The mean's and S.D.'s and statistical significance of the 4 groups

Group	Sub Scale 1	Sub Scale 2	Sub Scale 3	Sub Scale 4	Sub Scale 5	Sub Scale 6	Total
Neurotic Depression N = 30	22.03,2.55	22.72,2.10	61.57,2.89	66.32,2.22	34.32,2.80	37.07,2.95	243.87, 4.63
Hysterical Neurosis N = 30	21.37,2.22	21.22,2.07	53.82,2.96	59.23,3.40	44.90,2.81	36.20,2.80	236.67, 3.46
Normals N = 30	12.20,1.37	12.70,1.02	34.42,2.34	33.90,2.54	19.00,1.54	21.00,2.12	133.17, 3.96
Alcoholism N = 20	23.40,4.86	28.55,7.67	63.50,7.79	66.2,10.06	42.20,10.66	39.00,6.42	262.75,42.12
P	< .001	< .001	< .001	< .001	< .001	< .001	< .001

\* Comparison of groups 1, 2 and 3 as well as 1,2,3 and 4 showed highly significant differences.

Table 3  
Showing the significant 't' values between the groups

Sub Scales	Neurotic Depression & Hysteria	Neurotic Depression & Normals	Neurotic Depression & Alcoholics
1.	N.S	p < .001	N.S
2.	p < .05	p < .001	p < .01
3.	p < .001	p < .001	N.S
4.	p < .001	p < .001	N.S
5.	p < .001	p < .001	p < .01
6.	N.S	p < .001	N.S

to normal population. However, alcoholics had dysfunction mainly in the area of social support system and cohesion. All these differences were statistically significant.

#### Discussion

The mean scale scores for depressives (243.87), hystericals (236.67), alcoholics (262.75) are significantly higher than that of normals. Further between the groups the sub scales are in a position to demonstrate specific family dysfunctions. The ability of the scale items to discriminate between the different groups on different sub scales established its validity. It is clear that the scale measures family functioning in a demonstrable fashion. For example, depressives have a high mean in the areas of social support role, communication, when compared with hysterical group, they have high mean in every area when compared with the normals. On the other hand alcoholics have high mean only in social support system and cohesion.

In order to test its reliability the scale was given to the patients' family member and control's informant. There was no difference in their scores within the same group, establishes its inter rater reliability. Test-retest reliability is being carried on along with individual item analysis.

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