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# Class Change in the Personal Illness Hierarchy

By G. A. FOULDS, A. BEDFORD and K. G. CSAPO

**Summary**

Sixty-eight psychiatric in-patients who had completed the Delusions-Symptoms-States Inventory (D.S.S.I.) on admission were retested after one month. On first testing 92·6 per cent conformed to the hierarchy of classes of personal illness model, and on the second occasion 91·2 per cent. Of those who could improve, 72 per cent did so, most commonly by moving down one hierarchy class, e.g. from the Neurotic Symptoms class to the Dysthymic States class. (On the other hand only 30 per cent of the 61 patients who originally reported symptoms did *not* do so after one month.) Thus although it is clear that the patients as a group changed markedly, they have not departed from the hierarchy. These results indicate that either the symptoms further up the hierarchy remit before those lower in the hierarchy or they remit together. Certainly those lower in the hierarchy do not go first. It is suggested that the results would be difficult to accommodate within strict disease-entity models, and that they have different implications for both treatment and the assessment of change in current state.

## Introduction

Ninety-three per cent of 480 psychiatric in-, out- and day-patients who completed a self-report inventory, the Delusions-Symptoms-States Inventory (D.S.S.I.), conformed to the hierarchy of classes of personal illness (Foulds and Bedford, 1975). Just under 92 per cent of the 253 in-patients forming a part of this total group had patterns fitting the hierarchy model. Those who scored in Class 4 (Delusions of Disintegration—DD) also scored in Class 3 (Integrated Delusions—ID), Class 2 (Neurotic Symptoms—NS) and Class 1 (Dysthymic States—DS). Those who scored in Class 3 (but not 4) also scored in Classes 2 and 1. Those who scored in Class 2 (but not 4 or 3) also scored in Class 1. In other words, the data supported the theoretical contention that an inclusive non-reflexive relationship exists between the personal illness classes. Members of classes were predominantly found to be also members of *all* the lower classes in the hierarchy, whilst the converse was seen not to hold.

The purpose of this study is to determine whether or not the hierarchy is maintained as patients improve.

## Procedure

### *Subjects*

The 68 subjects were those in-patients whom it was possible and practical to retest; no deliberate selection was involved. They completed the D.S.S.I. within a week of entering treatment and again after approximately one month.

### *Instrument*

The D.S.S.I. (Foulds and Bedford) contains 12 sets of 7 items each. Class 4 has one set only (delusions of Disintegration); Class 3 has 3 sets (delusions of Persecution, of Grandeur and of Contrition); Class 2 has 5 sets (Pithiatic, Dissociative, Fear, Compulsive and Ruminative symptoms); Class 1 has 3 sets (states of Anxiety, Depression and Elation). Pithiatic and Fear were substituted for Conversion and Phobic mainly to avoid duplication of abbreviations.*

* Pithiatic, pithiatism and associated terms have a considerable history of usage in psychiatry, e.g. by Babinski. *Stedman's Medical Dictionary* (21st edition), 1966, misspells it as 'pithiatric' and defines it as 'referring to the class of conversion hysterical symptoms which can be made to disappear or be reproduced by means of suggestion'. See also *Chambers' Dictionary of Psychiatry*, 1967.



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Each item of the D.S.S.I. is scored 0, 1, 2 or 3 according to the degree of distress, frequency of occurrence or certainty of belief reported. Set membership is determined by a total score of 4 or more on the seven items of a set. Set membership automatically confers membership to the superordinate class, e.g. a score of, say, 12 on the state of Anxiety set allots that person to Class 1 (Dysthymic States). His scores on the other D.S.S.I. sets determine whether or not he is also a member of other, in this particular case 'higher', classes. When a 1 is given for class membership and a 0 for non-membership, the patterns which conform to the hierarchy are: 1111; 1110; 1100; 1000; 0000. There are 11 possible other *non*-fitting patterns, e.g. 0101, 0110, etc.

## Results

Table I shows the patterns on first and second testing.

On first testing, 5 patients (or 7·4 per cent) did not conform to the hierarchy. This figure is almost identical with that found for the 253 in-patients of which the present 68 were a part. (In terms of highest class membership the present group differ in containing a clear excess of Dysthymic States and a slight under-representation of Integrated Delusions.) On second testing, 6 patients (or 8·8 per cent) did not conform to the hierarchy. Although it is clear that the patients as a group changed markedly, they have not departed from the hierarchy.

Of 63 who fitted the hierarchy on first testing 3 ceased to do so on re-testing; but of the 5 who did not fit on first testing 2 did so on re-testing. Leaving aside non-fitting cases on *either* occasion, 38 improved, 16 remained the same (of whom 7 could not improve having started in Class 0, i.e. non-personally ill) and 6 were worse. Thus, 72 per cent of those who could improve did so; but only 34 per cent claimed to be symptom-free.

Of the 68 forming the total group only 37 per cent scored as non-personally ill at one month retest, despite the earlier mentioned excess of

Table I

*D.S.S.I. class change after one month*

| Test | | | Retest | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Class | Pattern | Other | Normal 0000 | DS 1000 | NS 1100 | ID 1110 | DD 1111 | Totals | %'s |
| DD | 1111 | 1 | — | 2 | — | 1 | 1 | 5 | 7·4 |
| ID | 1110 | 1 | — | 3 | 5 | 1 | 1 | 11 | 16·2 |
| NS | 1100 | 1 | 6 | 9 | 1 | 3 | — | 20 | 29·4 |
| DS | 1000 | — | 12 | 6 | 1 | 1 | — | 20 | 29·4 |
| Normal | 0000 | — | 7 | — | — | — | — | 7 | 10·3 |
| Other patterns | | 3 | — | 2 | — | — | — | 5 | 7·4 |
| Totals | | 6 | 25 | 22 | 7 | 6 | 2 | 68 | |
| %'s | | 8·8 | 36·8 | 32·4 | 10·3 | 8·8 | 2·9 | | |

Ignoring other patterns, cases:
above the solid line have 'moved down' at retest (N = 38).
below the dotted line have 'moved up' at retest (N = 6).
between the two lines maintain the same hierarchy class (N = 16).

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Dysthymic States. It is perhaps worth commenting that of the people initially scoring as non-personally ill some may be chronic patients, alcoholics or personality deviants. On the other hand, a total symptom score (ie. one ignoring cut-off points) would probably differentiate some of them from non-patient subjects.

Of the 44 fitting cases who change class, 73 per cent do so by one class, i.e. 27 of 38 who improve and 5 of the 6 who get worse.

## Discussion

At retest in-patients fit the hierarchy model to the same high degree that they—as well as a much larger group of mixed psychiatric patients—did at initial testing. These results indicate that either the symptoms further up the hierarchy remit before those lower in the hierarchy or they remit together. Without sequential testing, say weekly, a definitive answer is impossible. This finding is much less surprising than might appear at first sight. It is true that a state of Anxiety would generally be regarded as more amenable to treatment than, say, Compulsive symptoms or than delusions of Persecution; but this judgement is based on cases diagnosed respectively as Anxiety State, Obsessional Neurosis and Paranoid Psychosis, i.e. these diagnoses basically give affirmative information on only one syndrome. Within the hierarchy, however, we may be considering, for example, an Obsessional Compulsive (a Class 2 set) who also has a state of Anxiety (a Class 1 set). If the Anxiety went first, we would be left with an Obsessional Compulsive neurotic who was not anxious, which seems less likely than some anxiety outlasting the Obsessional symptoms.

The fact that patients tend to move down the hierarchy during the course of recovery is not easy to accommodate within disease-entity models as opposed to other medical models. The more strictly a psychiatrist adheres to a disease-entity model the more likely he is to treat a patient throughout in the light of his original diagnosis. Thus, a psychotic depressive will probably be given ECT or an anti-depressant drug. He will then be assessed as very much improved, somewhat improved or unimproved. Complete acceptance of a disease-entity model should entail that 'improved' refer to the symptoms of psychotic depression *alone*. Fortunately even the diminishing number of staunch supporters of disease-entity models are probably somewhat inconsistent in that their practice may often be at odds with their theory.

In the present hierarchy terms, it may be that 'very much improved' would refer to those patients who had moved down to Class 0, the symptom-free; 'somewhat improved' to those who had moved down to Class 2 (e.g. someone still showing phobic symptoms) or to Class 1 (e.g. someone still manifesting a state of Depression). A study designed to investigate these assumptions might be of interest and value.

Again, strictly according to a disease-entity model, the patient who has moved down from Class 3 to Class 2 should be given another course of ECT; but according to the hierarchy model, the phobic symptoms or whatever remained should be treated by the method the clinician thought most appropriate for that condition (e.g. behaviour therapy). It might be justifiable to carry out a study designed to compare the results of strictly working according to the disease-entity with those obtained according to the hierarchy model.

## Conclusion

Results from the Delusions-Symptoms-States Inventory indicate that the hierarchy of classes of personal illness is maintained after a period of one month, even though there has been a considerable reduction in the symptoms of the group as a whole. One can at least conclude from this that, when associated with a greater malady, the lesser malady does *not* remit first. Either the greater malady remits first or they remit together.

The fact that 30 per cent of the 61 patients who originally reported symptoms did not do so after one month perhaps suggests that ideally for them treatment should proceed within the universe of personality traits and attitudes. That most patients retained some symptoms, often having 'moved down' one hierarchy class level should direct attention to the use of combined treatments in conjunction with continuous assessments.

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REFERENCES

FOULDS, G. A. & BEDFORD, A. (1975) The hierarchy of classes of personal illness. *Psychological Medicine*. In press.

FOULDS, G. A. & BEDFORD, A. *Manual of the Delusions-Symptoms-States Inventory* (*DSSI*). In preparation.

G. A. Foulds, M.A., Ph.D., F.B.Ps.S., *Medical Research Council Unit for Epidemiological Studies in Psychiatry, University Department of Psychiatry, Royal Edinburgh Hospital, Edinburgh, EH10 5HF; and Visiting Professor, Department of Psychology, University of Western Ontario, London, Ontario, Canada*

A. Bedford, B.A., D.A.P., D.P.S.A., A.B.Ps.S., *Medical Research Council Unit for Epidemiological Studies in Psychiatry, University Department of Psychiatry, Royal Edinburgh Hospital, Edinburgh, EH10 5HF*

K. G. Csapo, B.A., M.A., Ph.D., *London Psychiatric Hospital, London, Ontario, Canada*

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