

## PSYCHOLOGICAL FACTORS ASSOCIATED WITH VISUAL IMPAIRMENT

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### SUMMARY

An attempt has been made to study the psychological pattern in terms of six criteria in the visually handicapped subjects. A total of 75 subjects were administered Cornell Medical Index health questionnaire. Twenty-five out of these had normal vision, another third had curable ocular disease and the rest were permanently handicapped.

Recently there has been an increasing stress in the intimate relationship between the mind and the body. These mutual influences are encompassed by the science of somatopsychology or psycho-somatic medicine. In keeping with this, eye complaints are symptoms of various psychiatric disorders like hysteria, tension and distress, insomnia, neurasthenia and schizophrenia, etc. (Clancy, 1963).

On the other hand, impaired vision in an individual will have a profound effect on his psyche (Baker, 1954), a view which is held also by many other authorities (Merry, 1937 ; Barker, 1948). Jain (1979) observed that the social implications of wearing spectacles induced frigidity like states in many an individual.

Whereas most of this work has been done with visual acuity as a criterion for blindness or visual impairment, Grand (1977) reported that the peripheral fields of vision variable was the single best predictor for anxiety in four of the five step-wise multiple regression analysis.

The present study aims at comparing the psychological pattern of the normally sighted, the curable visually impaired and the incurable visually handicapped.

### MATERIAL AND METHODS

A sample of 75 subjects was taken from the Department of Ophthalmology. Out

of these, 25 had normal vision, 25 had curable eye problems and 25 had incurable visual defects. A visual acuity between 2/60 to 6/60 or visual fields less than 20° when it was unimprovable with any modality of treatment was included in the incurably blind group. When the visual acuity was more than 6/24 with the necessary optical correction or treatment the subject was included in the curably impaired. No patient with duration of visual impairment less than four years was included. The psychological assessment was made with the help of emotional section of Cornell Medical Index (Brodman *et al.*, 1949). This section consists of 51 items grouped in six sections viz., inadequacy, depression, sensitivity, anxiety, anger and tension.

Questions were read out to the subjects and responses marked. In some cases, the test was self-administered. The entire questionnaire was examined to determine the number of 'yes' responses. Suspicion of seriousness of a disorder increases as the number of 'yes' marked items increases.

### RESULTS AND DISCUSSION

The results obtained are summarised in Tables I and II.

In Table I, insignificant values of t-ratio for the normal subjects and the curable individuals were found. This is explained by the fact that the curable subjects had

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**TABLE I**—*Values of means and standard deviation for total scores*

Group	Mean	SD
Normal	10.80	8.13
Curable	11.96	8.25
Incurable	18.25	9.40

Normal vs Curable :  $t=0.55$ , N.S.

Normal vs Incurable :  $t=2.96$ ,  $p<0.01$

Curable vs Incurable :  $t=2.72$ ,  $p<0.01$

normal vision with either spectacles or the prescribed treatment. Hence effect on the individual's psychology due to visual defect is lessened or abolished. Contrary to this, in the last two comparisons in Table I, the differences are statistically significant. In both of these, one of the two groups compared is incurably affected and this tends to make the score higher on health

questionnaire. This is because the knowledge of the incurability of their visual defect certainly affects their psyche badly.

Depression seems to be an aspect which is highly affected in the curable and the incurable group. But it is difficult to understand why comparison of the curable and the incurable does not yield differences of high probability in the field of anger as in all other parameters.

Values of Means and SD's for incurable subjects in this study are about three times as compared to those reported by Jain (1972). Further research seems desirable in this field to explain this discrepancy.

We found that patients with retinal diseases scored highest in all fields (19.72) and patients with refractive errors, the lowest (17.20). Glaucoma patients were found to score in between the two (17.40). This does not co-relate with the findings of Ash *et al.* (1978). But for such a comparison, our sample is relatively small.

**TABLE II**—*Showing values of means and standard deviations for all the areas*

Area	Normal		Curable		Incurable		t values		
	Mean	SD	Mean	SD	Mean	SD	Normal vs Curable	Curable vs Incurable	Normal vs Incurable
Inadequacy	3.04	2.98	3.16	2.94	4.60	2.88	0.14	1.73	1.86
Depression	0.68	1.02	0.72	0.96	2.44	1.70	0.14	4.97**	4.43**
Anxiety	1.44	1.32	1.56	1.54	2.36	1.50	0.29	1.90	2.30*
Sensitivity	1.92	1.79	2.08	1.76	3.08	2.17	0.31	1.78	2.06*
Anger	2.16	2.06	2.40	2.49	3.36	2.76	0.37	1.31	1.76
Tension	1.48	1.51	1.44	1.56	2.36	1.40	0.43	2.19*	2.20*

\* $p<0.05$ , \*\* $p<0.01$

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