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OCT 1979

ABSTRACT

This brief report presents supportive evidence for using the Cornell Index as a psychological and/or psychiatric measure of general maladjustment among newly admitted penitentiary residents. It also provides some support for the Cornell Index as a predictive indicator of subsequent institutional behavior among such residents. Data is presented indicating there is a higher verbal report of psychological, physical, and behavioral symptoms among newly admitted residents than comparable civilians. High verbal report of such symptoms among newly admitted penitentiary residents is associated with greater subsequent general maladjustment in an institutional setting than low verbal report.

OCT 1979

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~~X~~The Cornell Index:  
The Relationship of Psychological  
Maladjustment to Institutional Behavior

by

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A number of placement decisions must be made concerning each resident after his arrival at a correctional institution. Predicting behavioral adjustment for new residents is a necessary function of the psychiatric and/or psychological staff at the institution. In 1973, when the Ohio Correctional Reception Center was moved from the Ohio Penitentiary to the Chillicothe Correctional Institution, the intake screening process was suspended temporarily. This meant that new residents were being transferred to London Correctional Institution before they had been screened at the Ohio Correctional Reception Center. As this condition arose, it became necessary for the psychological staff of the Office of Psychological Services at the London Correctional Institution to develop a quick and accurate screening procedure which could be implemented in place of the now suspended screening procedure at the Ohio Correctional Reception Center.

At London Correctional Institution, which is a medium-minimum security facility, new residents are received each Monday from the Ohio Correctional Reception Center. After a week's general orientation, the new residents then are processed by the Classification Committee. It is the Classification

Committee's responsibility to determine each resident's placement suitability, assign job and dormitory placements, and make treatment program recommendations. All these decisions are contingent in part upon assessment of each resident's overall psychological adjustment and potential institutional behavior.

As part of the quick screening procedure for assessing new residents, which subsequently was developed, the Cornell Index (Weider, A., et. al., 1948) was selected to be administered to new residents. It was chosen as a screening instrument because it requires little time to administer; is relatively inexpensive; and has been used previously for screening purposes. Based on Cornell Index scores and study of other available record materials such as MMPI profiles, projective instrument results, etc., new residents were classified in accordance with their most likely problem areas. These major areas were routine, custodial, psychological, and medical. Custodial referred both to problems of security relating to institutional rule violations and escape attempts. Psychological referred to potential psychological problems if high scores on the Cornell Index were obtained and there was other supporting evidence available in the records. Medical referred to possible medical problems if many somatic complaints were reported on the Cornell Index and similar reports had been made to previous examiners. These classifications subsequently were used in part in the assignments of new residents to the institutional setting by the Classification Committee.

However, this report does not give the results of this quick screening procedure and its effectiveness in the assignments of new residents to their job and dormitories. Rather, it presents supportive evidence of the ability of the Cornell Index to discriminate general

adjustment and maladjustment in new residents, as well as its ability to predict residents' subsequent institutional adjustment or maladjustment. It was assumed initially in selecting the Cornell Index that the greater the number of psychological, physical, and behavioral symptoms verbally reported by new residents, the more they were likely to be generally maladjusted and the more likely they were subsequently to display institutionally maladjusted behaviors.

#### METHOD

##### Cornell Index Description:

This instrument basically conducts a structured but written interview with respondents with regard to a number of important problem areas relating to psychological, physical, and behavioral functioning. Problem areas relate to concurrent and historical functioning and permit respondents to answer a series of 101 items as either true or false. Total scores or sub-scores for problem areas then may be tallied for each respondent to give a measure of overall general maladjustment or specific maladjustment with respect to these several problem areas.

##### Procedure:

The Cornell Index was administered to each group of new received residents while they were undergoing general orientation in the institutional receiving area. The administration took place within the first week of arrival at London Correctional Institution. A member of the psychological staff instructed the group of residents in the answering of the questions and informed them that the results of this questionnaire would be used in the initial screening and placement process by the

Cornell Index

Table 1

Admission Rate of Maladjusted New Residents

Admission Time Period:	Average Rate of Newly Admitted Maladjusted Residents (per 1,000)
January-June, 1974	249
July-December, 1974	255
January-June, 1975	274
July-December, 1975	317
January-June, 1976	289
July-December, 1976	273
January-June, 1977	299

Note: Administration of the Cornell Index was stopped in June, 1977. Residents were considered to be maladjusted generally if their Cornell Index scores were 15 or greater. Only 140 persons per 1,000 among normals would be expected to have Cornell Index scores of 15 or greater.

Classification Committee. Individuals who reported having difficulty reading were given the Cornell Index orally later. The general maladjustment measure of the instrument was then scored according to the manual and a total score for each resident was obtained. Between 1973 and 1977, 3725 new residents took the questionnaire. It is these general maladjustment scores of the Cornell Index that partly were used in developing the data reported below.

### RESULTS

To demonstrate that the Cornell Index in fact was sensitive to the changing adjustment level of newly admitted residents, the long-term trend of the Cornell Index maladjustment scores were calculated for new residents at periodic times between January, 1974 and June, 1977. The trend of these general maladjustment scores was obtained by calculating the average rate per thousand of new residents whose scores were equal to or greater than 15. These results can be seen in Table 1 below. This table shows that admission rate for newly admitted residents for sequential six-month periods until cessation of data collection. It can be easily seen from these data that although there were cyclic periods of increased and decreased adjustment for new residents being admitted, the general maladjustment of new residents increased over time, at least until June, 1977 when data collection ceased. Normally, one would not expect to find such systematic changes in general maladjustment rate if the Cornell Index was insensitive to the changing level of adjustment for newly admitted residents.

Table 2

A Comparison of Newly Admitted Residents  
With Civilians (Manual) on Cornell Index<sup>a</sup>

Raw Scores on Cornell Index								
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	
Subjects:	0-4	5-9	10-14	15-19	20-24	25-29	30-34	
Residents:	1008	1021	571	395	241	157	332	3725
Accumulated Percent:	27	54	69	80	86	90	100	
Civilians:	1490	1118	484	317	190	98	30	3725
Accumulated Percent:	40	70	83	91	96	99	100	
Total:	2498	2139	1055	712	431	255	362	7450

<sup>a</sup>Chi-Square (6) = 384.75,  $p < .001$



In fact, to examine whether or not the Cornell Index does discriminate between individuals who vary in their presumed general adjustment, total maladjustment scores on the instrument for the newly admitted residents were compared with an equal number of civilian scores obtained from Mann's sample available in the index's manual. Table 2 presents the results of this comparison of penal residents and civilians. As can be seen immediately, the Cornell Index in fact does discriminate between the two samples of adults. Newly admitted residents tended to score on the higher end of the Cornell Index scale whereas civilians tended to score on the lower end of the index's scale. Thus, newly admitted residents reported more psychological, physical, and behavioral complaints and probably were more maladjusted generally than civilians who reported fewer psychological, physical, and behavioral complaints and probably were more adjusted generally.

To examine the ability of the Cornell Index to predict residents' institutional adjustment, a brief empirical study was conducted in 1975 comparing Cornell Index scores with the subsequent frequency of residents' disciplinary violations at London Correctional Institution. In this study, disciplinary violations included both verbal reprimands and disciplinary isolation placements. In this comparison, residents' Cornell Index scores were compared with the ratio of their disciplinary violations to the number of weeks spent at London Correctional Institution during the observation period. This type of dependent measure allowed disciplinary records to be compared realistically among residents who had spent different admission time periods at London Correctional Institution. Using several statistical techniques, the Cornell Index was found to discriminate between those

Table 3

Coefficients of Correlation (Point Bi-Serial) Between Cornell Index Scores and Levels of Adjustment for Residents

Dependent Variable:	Number of "Adjusted" Residents:	Number of "Maladjusted" Residents:	r:	df:
1	1 or Less Rule Violations Per Year 294	More than 1 Rule Violation Per Year 232	.06	524
2	2 or Less Rule Violations Per Year 365	More than 2 Rule Violations Per Year 161	.07	524
3	3 or Less Rule Violations Per Year 423	More than 3 Rule Violations Per Year 103	.08 <sup>a</sup>	524
4	4 or Less Rule Violations Per Year 454	More than 4 Rule Violations Per Year 72	.05	524

<sup>a</sup>r<sub>PBS</sub> = .083, p < .05

NOTE: Residents' institutional adjustment was assessed using a measure of rule violations per unit of time where  $\text{Adjustment} = 1 - \frac{\text{Number of Rule Violations}}{\text{Number of Weeks Admitted}}$

residents who incurred fewer official rule infractions and those residents who incurred sizeable numbers of official rule infractions. These different results are presented in Table 3. When the Cornell Index scores and the institutional adjustment rating of residents were ranked and correlational procedures applied, the Spearman ranked correlation coefficient was found to be .20 (df = 526). A test of significance revealed a  $t = 4.68$  with  $p < .001$ . These results indicated that the Cornell Index has some value in predicting residents' institutional adjustment as it is reflected in the number of rule violations per unit of time collected by residents.

In a more recent examination of the Cornell Index's ability to predict residents' institutional adjustment, residents who had no rule violations were compared with residents who had rule violations (including disciplinary transfers) at London Correctional Institution during the 1976-77 period. The period of observation included what might be called their complete institutional career at London Correctional Institution and varied in the amount of time served. A comparison of Cornell Index scores for both groups of residents, violators and non-violators, is shown in Table 4. As can be seen in this table, the largest areas of difference between the two types of residents were in the 16 and over and 4 or less categories. Non-violating residents were over represented in the 4 or less category of Cornell Index scores, and violating residents were over represented in the 16 and over category of Cornell Index scores. Thus, support once again was obtained to suggest that the Cornell Index is useful in predicting general institutional adjustment or maladjustment. Verbal report of psychological, physical, and behavioral symptoms appeared to be predictive

Cornell Index

Table 4

A Comparison of Cornell Index Scores for  
Groups of Good and Poor Adjusting Residents<sup>a</sup>

Resident Types:	Cornell Index Raw Scores				Number:
	0-4	5-8	9-15	16+	
All Violators:	75	78	74	112	339
Accumulated Percent:	22	45	67	100	
Non-Violators:	76	63	56	48	243
Accumulated Percent:	31	57	80	100	
Number:	151	141	130	160	582

<sup>a</sup>Chi-Square (3) = 14.20, p < .01

of subsequent institutional maladjustment of residents.

As has been suggested in previous reports (Pinti and Jones, 1975; Rahn and Jones, 1976), Cornell Index scores appear to be sensitive to changes in general adjustment among penitentiary residents. They also are generally different from those obtained with a civilian sample. And they appear to predict in some degree future institutional behavior. It would appear that verbal report on the Cornell Index which produces a high general maladjustment score reflects an "I can't stand it" attitude toward life in general or for a new resident, his present circumstance. As several writers (Ellis, 1974; Ellis, 1975; Ellis, 1977; and Lazarus, 1976) have noted, such an unconstructive attitude among residents upon entry usually results in either a depressed withdrawal or an agitated anger. Such emotional states can easily lead to maladaptive behaviors which are viewed as undesirable in an institutional setting, thereby earning penitentiary residents increased rule infraction tickets.

Also, the Cornell Index contains many items related to headaches, backaches, gastric distress, insomnia, restless activity, etc. As has been suggested elsewhere (Yochelson and Samenow, 1977), incarcerated criminals frequently experience somatic complaints similar to these symptoms when they are prevented from engaging in further self-defeating activities. The more frequent and intense an individual's criminal thinking is, if his desires are blocked, the greater his somatic complaints will be. The structured and supervised environment of a medium-minimum custody institution such as London Correctional Institution combines both a high rate of criminal detection and a strong negative sanction against such criminal behaviors that many residents would like to perform but seek to suppress (Wishnie, 1977).

In general, it appears that the resident whose high level of criminal thinking is reflected in high Cornell Index scores becomes more involved in institutional disciplinary violations than the resident with less criminal thinking and lower Cornell Index scores. Indeed, many violations both in and out of prison are unconstructive efforts at social influence. Being sick and getting care from others, or being sick and acting out, becomes another set of efforts at power seeking behavior.

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