

AUTHORITARIAN ATTITUDES AND PERSONALITY MALADJUSTMENT

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SINCE the publication of *The Authoritarian Personality* (2), the relationship of ethnic prejudice and authoritarian attitudes to personality and psychopathology has been the subject of a number of studies. Several scales have been used as measures of authoritarian attitudes, and the personality factors underlying authoritarianism have been investigated with an even greater variety of techniques. The most frequently used attitude measures in studies of this type have been the Anti-Semitism (A-S), Ethnocentrism (E), and Fascism (F) scales developed in *The Authoritarian Personality*. The personality side has been assessed by means of clinical interviews (2), psychoanalysis (1), the Thematic Apperception Test (2), the Rorschach (15, 19), the Rosenzweig P-F test, the Allport-Vernon Scale of Values, and other tests (10). The MMPI has been used most often in studying the authoritarian syndrome (2, 3, 8, 10, 11, 12, 17). A survey of these studies, the majority of which have been reviewed by Christie (5), leaves no doubt that personality factors account for a substantial portion of the variance in ethnic prejudice and authoritarian attitudes in general. The question that still remains open, however, concerns the characteristics and the extent of these personality factors.

Two rather different approaches to this question may be discerned. In one approach the emphasis is on describing the psychodynamics (if the investigator is psychoanalytically inclined) or the trait structure (if the investigator is factor-analytically inclined) of the authoritarian personality, but without reference to psychological maladjustment per se. The dynamic approach is exemplified, for example, by the work of Frenkel-Brunswik (see 5, pp. 226—275). The trait structure approach is represented in the work of Eysenck (7), who conceives of the authoritarian personality as representing one extreme of the dimension of "tough-mindedness-tendermindedness," which in turn he conceives as a projection onto the social attitude field of a set of constitution-

ally determined personality variables, viz., introversion-extraversion. In Eysenck's scheme the introversion-extraversion dimension is represented as independent of "neuroticism" or maladjustment. More will be said concerning this theory in the light of the present evidence.

The second, more prevalent, approach has been concerned with the kind and degree of personality maladjustment associated with authoritarian attitudes. Psychiatric diagnostic techniques, particularly the MMPI, have figured prominently in this research. And it is largely at this point that most of the disagreements have arisen. Thus Masling (17) has criticised the idea that authoritarianism is related to psychological maladjustment, and has mentioned investigations on four groups of psychiatric patients that failed to show significant correlation between various measures of authoritarianism (Anti-Semitism, Ethnocentrism, and Fascism scales) and several criteria of psychopathology, including the MMPI. And Maria Levinson (2, p. 968) found that the entire range on the Ethnocentrism scale was represented in a group of psychiatric clinic patients.

The studies which have found more positive evidence of a relationship between maladjustment and authoritarianism (8, 10, 11) have been addressed not to the question of whether psychiatric patients obtain higher or lower scores than "normal" subjects on measures of authoritarianism, but rather to that of whether persons in the normal or nonpsychiatric population who score high on measures of authoritarianism show a greater degree of mental ill-health than persons scoring low on authoritarianism. It seems likely that the relationship between mental ill-health and authoritarianism does not hold in both directions. In other words while it may be possible to have any degree of mental illness without showing authoritarian attitudes, it may not be possible to manifest an extreme degree of authoritarianism without being psychologically maladjusted. One may conceive of the scatter diagram of the correlation between authoritarianism and maladjustment as being more the

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shape of a right triangle rather than the usual ellipse. This rough hypothesis helps to explain some of the seeming contradictions found in the literature, and if it appears at all tenable, as it does to the present writer in viewing the recent research, it would seem that the most satisfactory approach to the problem of authoritarianism and mental health would be to assess the psychological adjustment of individuals at the two extremes on measures of authoritarian attitudes. This essentially was the plan of the present study.

The Prejudice scale. The principal instrument used as a measure of prejudice in this study was the *Pr* (prejudice) scale, which Gough (11) derived by an item analysis of the MMPI, using the Levinson-Sanford Anti-Semitism scale (16) as the criterion. While the *Pr* scale consists of 32 items of the MMPI, it has no more than seven items in common with any other MMPI scale (*Pa*), and one-fourth of the *Pr* items do not appear in any of the other clinical scales.

The reliability and validity of the *Pr* scale were sufficiently high in Gough's studies (11, 12) to warrant its use as an instrument for measuring prejudice on the personality level. The *Pr* scale has been shown to be significantly correlated with anti-Semitic, ethnocentric, and authoritarian attitudes as measured by the A-S, E, and F scales (11). The relative magnitudes of these correlations indicate that the *Pr* scale may be regarded actually as much a measure of authoritarian attitudes as of prejudice. It should also be recognized that the 32 items of the *Pr* scale, constituting about 6 per cent of the total MMPI items, are almost certainly not the only items of the MMPI that are correlated with authoritarianism. Altus and Tafajian (3) subjected the MMPI to an item analysis using high and low scores on the F scale as the criterion, and found 40 items which together correlated .62 with the F scale. Yet only six of the *Pr* items were among these 40. In the present study an item analysis of the *Pr* scale, using *Ss* in the highest and lowest 27 per cent on the F scale as the criterion, showed that 20 of the 32 *Pr* items discriminated between the high and low groups in the F scale at the 5 per cent level of confidence or better. Thus there are at least 66 items of the MMPI which have been shown to be correlated with authoritarian attitudes. It appears, however, that while many of the

MMPI items are related to the authoritarian syndrome, the relationship is tenuous and various items do not have the same degree of discriminatory power in different populations. A likely hypothesis seems to be that the discriminatory power of the items is related to the degree of educational sophistication of the subjects and probably other factors that have educationally selective effects. This possibility is suggested by the fact that 20 of the *Pr* items discriminated between high and low F-scale subjects among the San Diego State College students and only 6 of the *Pr* items were found to discriminate between high and low F-scale subjects in the study by Altus and Tafajian (3), whose subjects were students in a psychology course in the Santa Barbara College of the University of California, and probably represent an educationally, or at least psychologically, more sophisticated group. (Psychology majors in San Diego State College generally had the lowest *Pr* scores of any students in the present study.)

The content of the *Pr* items may be interpreted in general terms as representing attitudes of anti-intellectuality ("I like science"—*false*. "I like poetry"—*false*), cynicism ("Most people make friends because friends are likely to be useful to them"—*true*), distrust ("I think most people would lie to get ahead"—*true*), doubt and suspicion ("I commonly wonder what hidden reason another person may have for doing something nice for me"—*true*), misanthropy and querulousness ("The man who provides temptation by leaving valuable property unprotected is about as much to blame for its theft as the one who steals it"—*true*), discontent with self-status and fearful self-concern ("It makes me feel like a failure when I hear of the success of someone I know well"—*true*. "Several times a week I feel as if something dreadful is about to happen"—*true*).

The fact that certain MMPI items differentiate between high and low scorers on measures of prejudice and authoritarianism and that the *Pr* scale is correlated with the A-S, E, and F scales has led some writers (3, 11) to characterize the authoritarian personality in terms of the content of these MMPI items. Strictly speaking this is not a valid procedure. In order to be valid, an additional investigation would be required to determine whether or not the items were factually true statements about the individuals taking the test. Since this has

never been done, and indeed would not even be advisable, we can legitimately make no use of item content other than as a possible source of hypotheses about personality.

A more defensible approach would consist of determining the relationships between the authoritarian measures and the various clinical scales of the MMPI and then characterizing the authoritarian personality in terms of our empirical knowledge of the meaning of the clinical scales, which have been elucidated by innumerable studies (6). Even then, caution must be taken not to think of the authoritarian personality in the singular. The approach suggested above would permit a number of generalizations about the personality characteristics to be found among a *group* of persons having authoritarian attitudes, but most likely only some of these generalizations would hold true for any individual.

METHOD

Subjects. The group form of the MMPI was administered to 712 entering freshmen in the San Diego State College, a four-year coeducational liberal arts college in Southern California, and was readministered one year later to the 312 students of this class who remained in college to begin their sophomore year. The same data and in addition the California *F* scale (Form 60A) were obtained from 114 seniors majoring in education. Intelligence test (American Council on Education) scores and grade-point averages were also available for all the freshmen.²

The one rather atypical feature in this sample seems to be the high drop-out rate (56 per cent) between the freshman and sophomore years. The writer can only add his speculations to the few points in the data that suggest possible causes for so many drop-outs. For one thing, the "G.I. Bill" was still in effect at the time these data were gathered and large numbers of men were caused to enter college who otherwise would not have sought college training, not only for lack of financial means but also of the necessary academic interests and aptitudes. The college entrance requirements were relaxed for these students, while academic standards were maintained at a high level. Thus many were discouraged from continuing beyond their first year. The mean *Pr* score of the students who dropped out of college was significantly ($p < .05$) higher than those who continued, suggesting that the drop-outs were more like noncollege groups and high school students who do not plan to go to college (13, p. 265). These groups typically are known to obtain higher *Pr* scores on the average than college groups.³ Another cause of

² I am indebted to Dr. Kenneth Eells for having made these data available to me.

³ The writer also administered the *Pr* and *F* scales to 96 junior college vocational students in the same locality and found their mean scores on both scales to be significantly ($p < .001$) higher than those in the liberal arts college.

TABLE 1
T CONVERSION TABLE AND PERCENTILES FOR *Pr*
SCORES, BASED ON 712 COLLEGE FRESHMEN
(342 MALES, 370 FEMALES)

Raw Score	<i>f</i>	Per- centile	<i>T</i> Score*	Raw Score	<i>f</i>	Per- centile	<i>T</i> Score
28			**	13	23	83	60
27	1	99	77	12	43	79	58
26			76	11	40	73	56
25			76	10	50	67	55
24			75	9	41	60	53
23			75	8	66	53	51
22	1	99	74	7	62	44	48
21	7	99	73	6	64	35	46
20	2	98	71	5	55	27	44
19	2	98	70	4	56	19	41
18	13	97	69	3	48	12	38
17	14	95	67	2	41	5	34
16	14	93	65	1	11	2	29
15	24	90	63	0	7	1	24
14	27	87	61				

* Since the distribution of raw scores is significantly skewed, the *T* scores have been normalized.

** The absence of frequencies above this point prohibits the computation of *T* scores.

the high drop-out rate is that for many students the state college is a stepping stone to other colleges and universities.

RESULTS

Characteristics of Pr. Since normative data on the *Pr* scale have been published only for a sample of high school seniors (11, 12), it would seem advisable to present similar data for a college sample before going on to make further interpretations on the basis of *Pr*.

The distribution of raw *Pr* scores in the college sample is conspicuously more constricted and positively skewed than in Gough's high school sample. In order to make comparisons of the *Pr* scale with other MMPI scales, a *T* conversion table was prepared (Table 1). This *T* scale has a mean of 50 and a standard deviation of 10. Since a test of the skewness of the distribution of raw scores was significant at the 5 per cent level, the *T* scale was normalized.

Table 2 is quite self-explanatory. The following points in this table are to be noted.

a. The reliability of *Pr* is consistent with Gough's findings (11, p. 254) and compares favorably with the reliability of other MMPI scales (see 6, p. 5).

b. The retest reliability after one year is notably high considering the restricted range of scores.

c. The mean *Pr* for the freshmen is approximately one standard deviation lower than that

TABLE 2
DATA ON *Pr* SCALE IN TWO COLLEGE SAMPLES

<i>Pr</i> Data	College Freshmen <i>N</i> = 712	Education Majors (Seniors) <i>N</i> = 114
<i>a</i> Split-half reliability (odd-even, corrected by Spearman-Brown formula)	.81 (<i>N</i> = 100)	
<i>b</i> Retest reliability (1 year interval)	.56 (<i>N</i> = 312)	
<i>c</i> Mean and Standard Deviation	8.35 <i>SD</i> 4.59	6.37 <i>SD</i> 3.43
<i>d</i> Average decrease in <i>Pr</i> after 1 year of college and Critical Ratio for the difference	2.05 <i>CR</i> 9.45 (<i>N</i> = 312)	
<i>e</i> Correlation of <i>Pr</i> with <i>F</i> scale (Form 60A)*		.27 SE .09
<i>f</i> Correlation of <i>Pr</i> with intelligence (American Council on Education test)	-.15, SE .06 (<i>N</i> = 288)	
<i>g</i> Correlation of <i>Pr</i> with Grade Point Average	-.13, SE .06 (<i>N</i> = 288)	

* This scale is identical with the E-F scale given in Gough paper (10, pp. 239-241).

of Gough's high school sample, and the mean of the education majors is nearly two standard deviations lower. This is consistent with the findings of other studies, which report significant correlation between educational level and measures of authoritarianism (5, p. 170).

d. The systematic lowering of *Pr* scores after one year of college is highly significant. While 69 per cent of the *Ss* obtained lower *Pr* scores on the retest, only 20 per cent obtained higher scores. The 11 per cent whose scores did not change over the one-year interval had a very low mean *Pr* of 5.77, *SD* 3.71.

e. The correlation of *Pr* with the *F* scale in the college senior group is considerably lower than the correlation of .46 in Gough's study. This is undoubtedly due to the very restricted range of scores on both scales in the college sample, a factor tending to lower the correlation coefficient. When the present sample was combined with a group of 96 junior college vocational students who had taken the same tests, the correlation between *Pr* and *F* rose to .65, SE .07.

f & *g.* The correlations of *Pr* with intelligence and grade-point average are similarly

much lower than those in Gough's study, again because of the greater homogeneity of the college sample, with the consequent restriction of range on the correlated variables. Both the correlations, however, are statistically significant at better than the 5 per cent level of confidence. While there is certainly a negative correlation between intelligence and *Pr*, as well as of other measures of authoritarianism (5, p. 168), intelligence may be regarded as a negligible factor in the variance of *Pr* in a college population. For example, it was found that groups even with widely differing *Pr* scores (above 15 and below 3) showed no significant difference in mean intelligence test (ACE) scores.

Some additional findings about *Pr* may be noted. There were no significant differences between men and women. Students majoring in different subjects had significantly different mean *Pr* scores. Why these differences should exist among groups of students of the same age, at the same stage in their education, and in the same college would be difficult to explain except in terms of personality differences. Most of the groups representing different fields of study were too small to permit meaningful statistical comparisons, but the two largest groups—business majors and education majors—showed a highly significant difference ($p < .001$) in mean *Pr* scores. The high *Pr* groups were students majoring in business administration, commerce, social work, art, music, mathematics, and chemistry. The low *Pr* groups were students majoring in psychology, education, physics, biology, and economics. Any generalizations or interpretations from these data alone would necessarily be *ad hoc*. Since the students in all these groups took the MMPI at the very beginning of their freshman year, there can be no reflection on the influence of the faculties or curricula of the various departments of the college in contributing to these differences in mean *Pr*.

Pr and personality adjustment. The greatly restricted range of the *Pr* distribution in this college sample, with the large piling-up of scores toward the low end of the scale, and the likely constriction and skewness of the distribution on most of the clinical scales of the MMPI, deterred the investigator from studying the relationship between *Pr* and the clinical scales by means of the correlation co-

efficient. The nature of the distributions in this sample would have so attenuated the correlations as to obscure possibly important relationships. Therefore it was decided to compare the MMPI clinical scales of adequately large groups of high and low Ss on *Pr* to permit the emergence of relatively unambiguous statistical significance should real differences exist. While it is the standard practice to use the upper and lower 27 per cent of the distribution in comparing high and low groups, this cutoff point would be impossible in the present distribution, as is obvious from inspection of the Percentile column in Table 1. There would be only five points difference between the highs and lows if the upper and lower 27 per cent were used, and furthermore the highs would still fall below the mean *Pr* of noncollege groups. Therefore it was decided to select from the 712 freshmen who took the MMPI the upper 7 per cent ($N = 54$) on the *Pr* scale (scores above 15) and the lower 8 per cent (scores below 3, $N = 59$).

Comparisons between these groups on the

nine clinical scales and the *K* scale of the MMPI revealed that some of the scales discriminated positively, some negatively, and others not at all. On each scale that showed a difference between the high and low *Pr* groups, this difference was significant at better than the .001 level of confidence. The differences on the remaining scales were in all cases smaller than the standard error of the difference and thus completely nonsignificant. The high *Pr* group was higher (more "maladjusted") on the following MMPI scales: *Hs* (hypochondriasis), *D* (depression), *Pd* (psychopathic deviate), *Pt* (psychasthenia), *Sc* (Schizophrenia), and *Ma* (hypomania). The following scales discriminated negatively: *K* ("defensiveness") and *Hy* (hysteria). The *Mf* (masculinity-femininity) and *Pa* (paranoia) scales did not discriminate significantly. These results are presented in Table 3 in such a way as to permit comparisons with other studies on the relationship between measures of authoritarian attitudes and the MMPI scales. The magnitude of the correlations has not been given, as

TABLE 3
RELATIONSHIPS¹ BETWEEN VARIOUS MEASURES OF AUTHORITARIANISM AND THE MMPI SCALES

Study	Sample	N	Measure of Relationship	Criterion Scale	MMPI Scales										
					<i>K</i>	<i>Hs</i>	<i>D</i>	<i>Hy</i>	<i>Pd</i>	<i>Mf</i> (m)	<i>Mf</i> (f)	<i>Pa</i>	<i>Pt</i>	<i>Sc</i>	<i>Ma</i>
Jensen	College Freshmen	113	<i>t</i> ²	<i>Pr</i>	-	+	+	-	+				+	+	+
Tyler (20, p. 453)	Graduate Education Majors (female)	107	<i>r</i>	<i>Pr</i>	0 ³		+	-				-	+	+	+
Gough (12, p. 258)	High School Seniors Class A	271	<i>r</i>	<i>Pr</i>	-		+	-	+	+		+	+	+	+
Gough (12, p. 258)	High School Seniors Class B	231	<i>r</i>	<i>Pr</i>	-		+		+	+		+	+	+	+
Gough (10, p. 241)	High School Seniors Class A	271	<i>r</i>	A-S ⁴	-		+			-	-		+	+	
Gough (11, p. 249)	High School Seniors Class A	80	<i>t</i> ⁵	A-S ⁴	-		+		+				+		
Gough (10, p. 241)	High School Seniors Class A	271	<i>r</i>	E-F ⁶	-			-							
Freedman, et al. (8, p. 317)	College Freshmen Sample 1 (female)	441	<i>r</i>	F ⁷	-	+		- ⁸				-	+		
Freedman, et al. (8, p. 317)	College Freshmen Sample 2 (female)	225	<i>r</i>	F ⁷	-			- ⁸				-			-

¹ + indicates a positive correlation, - indicates a negative correlation. Only relationships significant beyond the .05 level of confidence are given. In the Jensen study all relationships are significant beyond the .001 level.

² *t* test for significance of differences between means of highest 7 per cent (*Pr* scores above 15) and lowest 8 per cent (*Pr* scores below 3) in a sample of 712 Ss.

³ *K* scale not used in Tyler's study.

⁴ Levinson-Sanford Anti-Semitism Scale (16).

⁵ *t* test for significance of differences between means of highest 40 and lowest 40 on A-S scale in a sample of 271 Ss.

⁶ Gough's E-F scale (10, pp. 239-241) is made up of 30 items from the California F scale, Form 60 (2, pp. 248-250).

⁷ California F scale (2, pp. 255-257).

⁸ The somatic items of the *Hy* scale were not counted for this correlation in Freedman's study. The correlation for the complete *Hy* scale was non-significant.

⁹ The Class A High School Seniors in Gough's study is the same sample in every instance; therefore the four sets of data from Gough are not independent.

these vary considerably from one sample to another and essentially add nothing to the picture. Only those relationships significant beyond the 5 per cent level have been included.

Though these results clearly establish the fact of a relationship between *Pr* and certain clinical scales, they alone are not sufficient to answer the question concerning the relation of *Pr* to psychological maladjustment. The correlation, or differences between high and low groups, could conceivably be based entirely on MMPI scores considered to be well within the normal range of psychological adjustment. In order to answer this question the high and low *Pr* groups were compared with respect to the proportion of each group obtaining *T* scores above 70, i.e., the level generally indicative of psychological maladjustment. The results were clear-cut. A significantly ($p < .01$) greater proportion of the high *Pr* group obtained *T* scores above 70 on the following scales: *D*, *Pd*, *Pa*, *Pt*, *Sc*, *Ma*. For each of these scales, on the average, there were about twelve times as many of the high *Pr* group who obtained *T* scores above 70 as of the low *Pr* group. The scales on which the proportions of high and low *Pr* groups having *T* scores above 70 were *not* significantly different were *Hs*, *Hy*, and *Mf*.⁴ It should be noted that while in the comparisons of Table 3 the *Hy* scale is inversely related to *Pr*, the high and low *Pr* groups do not differ in the proportions obtaining *T* scores above 70 on the *Hy* scale. This finding suggests that though low *Pr* is associated with high *Hy* in this sample, the *Hy* is not so high as to be in the abnormal range. The nonhomogeneous character of the *Hy* scale also enters the picture here. For example, Freedman *et al.* (8) found a significant negative correlation between *Hy* and the California *F* scale in their college sample only when they removed the somatic items from the *Hy* scale.

Another question remains to be answered concerning the relationship of *Pr* to adjustment. That is, do students who show signs of poor psychological adjustment as judged independently of the MMPI also have higher *Pr* scores than students who appear to be well-adjusted? To get at least a rough answer

to this question the entire college faculty was asked to submit the names of students whom they knew personally and considered either well-adjusted or poorly adjusted in the sense of being likely candidates for psychological counseling. None of the faculty had any knowledge of the aims of this study. Students about whom there was general agreement by two or more of the faculty were compared on the *Pr* scale. Again the results were clear-cut. The poorly adjusted group ($N = 30$) had a significantly ($p < .001$) higher mean *Pr* (9.93) than the well-adjusted group ($N = 57$) with a mean *Pr* of 5.61.

DISCUSSION

There is quite clearly a relationship between authoritarian attitudes on the personality level as measured by the *Pr* scale and psychological maladjustment as measured by the MMPI as well as by faculty ratings. But in addition to this general finding, what more specifically can be gleaned from these data as to the aspects of personality tapped by the *Pr* scale? While in any one study in which a number of correlations or group differences are obtained certain of these may lack general significance because of peculiarities of the particular sample, the type of analysis applied, or the merely chance fluctuations of sampling, the marked consistencies shown in the studies summarized in Table 3 do provide a sound basis for interpretation. The *K*, *D*, *Hy*, *Pt*, and *Sc* scales display the most consistent relationship to measures of authoritarianism, and so the discussion is confined to these.

Not only does *K* show negative correlations with authoritarian measures in every study, but these correlations are generally higher than any of the others. Gough (12), for instance, found correlations between *Pr* and *K* which were nearly as high as the reliabilities of either of these scales. The meaning of *K* is complex. The scale was originally devised as a correction factor for the clinical scales (18) but has since been found to have psychological significance in its own right. In the clinical interpretation of the MMPI a high *K* score is regarded as indicative of a defensive attitude, and a low *K* score suggests unguarded and indiscrete frankness and a tendency to speak critically of self. Low *K* is found most frequently in conditions characterized by ego

⁴ The *K* scale was not included in these comparisons since it has not been validated as a measure of maladjustment.

weakness, in which the person is psychologically naked and vulnerable, as in the psychoses and anxiety states. *K* shows a high negative correlation ($-.74$) with the Taylor Manifest Anxiety Scale (4), and a factor analysis of the MMPI in a college sample by Wheeler (21) shows a low *K*, along with high *Pl* and *Sc*, to be highly saturated with the factor interpreted as anxious self-concern with which the ego defenses seem inadequate to cope. High *K*, along with high *Hy*, was saturated with the factor interpreted as intactness of the ego-defense mechanisms. Wheeler's study also highlights the inverse similarity between *K* and *Pr*, in that correlations between *K* and the other MMPI scales show very much the same pattern as does the *Pr* scale, except of course that the direction of the correlation is reversed, since *Pr* and *K* are negatively correlated. High *K* scores have been found to be associated with the following traits: sociable, wide interests, reasonably enthusiastic, and verbal; low *K* scores: high-strung, cynical, dissatisfied, and individualistic (14, p. 78). *K* is positively correlated with intelligence and socioeconomic status and there is a tendency for college students and college-educated persons to obtain *K* scores one-half to one standard deviation higher than the noncollege population—the same relationships that have been found (inversely of course) for the *Pr* scale (6, 15). Of all the MMPI scales, *K* is probably the best single index of the personality factor tapped by *Pr*, at least in the nonpsychiatric population.

The positive correlation between ethnic prejudice and the *D* scale was first noted in *The Authoritarian Personality*, somewhat to the surprise of the investigators, since clinical signs of depression were more apparent in psychiatric patients scoring low on ethnocentrism. As seen in Table 3, however, the positive relationship of authoritarian attitudes with *D* is entirely consistent in several studies. That *D* is not a homogeneous scale and must always be interpreted in relation to other scales in clinical practice may account for the apparent discrepancies with the clinical observation noted in *The Authoritarian Personality*. There is considerable overlap in the traits associated with high *D* and low *K*. Persons obtaining high *D* scores are characterized by lack of self-confidence, tendency to worry,

narrowness of interests, poor morale, an uneasy self-concern and dissatisfaction with their current situation (6). Except in relation to other scales *D* is difficult to interpret clinically. However, taken alone it may be regarded as the best single index of maladjustment in the MMPI (9).

The *Hy* scale shows a consistently negative correlation with the *Pr* and *F* scales. Since *Hy* and *K* are highly correlated, a similar interpretation as that given for *K* applies also to *Hy*: in short, there appears to be a negative relationship between repressive tendencies and authoritarianism. Like *K*, *Hy* is positively correlated with intelligence and is usually about one-half standard deviation higher in college samples than in the adult standardization group. It is quite clearly the psychic and not the somatic items of the *Hy* scale that account for its negative correlations with both *Pr* and *F*. Freedman *et al.* (8) found the correlations between the *Hy* scale and the California *F* scale in two college samples to be $-.02$ and $.00$. But when the somatic items were removed, the correlations rose to $-.41$ and $-.44$. A high *Hy* score based on the psychic items indicates a tendency not to tire easily, not to be depressed, a feeling that life is good and that the world is benevolent—in short, a rather optimistic, extraverted attitude.

The negative correlation (or absence of correlation) between authoritarianism and the *Pa* (paranoia) scale is usually viewed with surprise, for *The Authoritarian Personality* called upon the paranoid mechanisms of projection, extrapunitive, and power orientation in explaining the authoritarian syndrome. The reason for the negative correlation between *Pa* and *F* (and presumably also for the lack of correlation with *Pr* in the present study) has been adequately explained by Freedman *et al.* (8) in terms of the heterogeneous nature of the *Pa* items. When the *Pa* scale is broken down into three types of items, the correlations between *F* and these sub-*Pa* scales are as follows: Persecutory Ideas ($r = .01$), Poignancy ($r = -.07$), and Naïveté ($r = -.22$). This last correlation was significant at the .001 level and it seems safe to say it is this element of the *Pr* scale that largely accounts for the negative correlation with authoritarianism. The "persecutory"

items are not at all subtle, hardly concealing their pathological implications, and comparatively few of them are responded to in the keyed direction by more sophisticated *Ss* such as college students. But as the *Pa* score rises, more of the "persecutory" items are of course included, and it should be noted that when the high and low *Pr* groups in the present study were compared for the proportions of *Ss* obtaining *T* scores over 70, the high *Pr* group was significantly *higher* on *Pa*, because more of them responded in the keyed direction to a larger number of *Pa* items, including the "persecutory" items, which are most commonly associated with paranoia.

The *Pt* scale is a relatively pure measure of neuroticism of the anxiety and obsessive-compulsive varieties. Persons scoring high on *Pt* show excessive doubts, compulsions, obsessions or unreasonable fears, anxiety, perplexity, and apprehension.

The *Sc* scale in nonpsychiatric populations is associated with schizoid tendencies, feelings of isolation, disinterest, and pessimism.

In the over-all picture presented by these scales—those most consistently related to authoritarian measures—the emphasis is on the obsessive-compulsive syndrome (high *D*, *Pt*, *Sc*) and there is comparatively little hysterical and repressive tendency (low *Hy* and *K*). The impression is that prejudiced, authoritarian persons have less well-developed ego defenses and are thus more exposed and vulnerable to psychological stress, in the face of which they develop tendencies toward pessimism, cynicism, low morale (*D*), and psychological isolation (*Sc*), along with the more primitive defenses of a compulsive, ritualistic, and schizoid nature (the triad *D*, *Pt*, *Sc*).

In view of the picture presented by the data of this study, as well as the consistencies seen in several others, it seems to this writer that an adequate theory of social attitudes, particularly those in the domain of ethnic prejudice and authoritarianism, must take into account psychopathological aspects of personality. To ignore them seems an unwarranted oversimplification of this complex field. Eysenck, for example, has formulated a theory of social attitudes which essentially leaves out of account the relationship between

social attitudes and personality adjustment (7). Eysenck conceives of social attitudes as being determined by two orthogonal factors—the Radicalism–Conservatism dimension (R-factor) and the Toughminded–Tenderminded (T-factor) continuum. We shall be concerned here only with the T factor, which is regarded as a projection onto the social attitude field of a fundamental dimension of personality, viz., introversion–extraversion which is said to be constitutionally determined and is conceived as being entirely unrelated to emotional instability or neuroticism (7, p. 179). Eysenck equates the authoritarian–democratic continuum with the T factor, authoritarian attitudes being an expression of toughmindedness. Furthermore he considers the A-S, E, F, and *Pr* scales as essentially measures of toughmindedness (7, pp. 148, 152, 233). They should therefore be highly correlated with measures of extraversion and show comparatively little, if any, correlation with measures of neuroticism. Eysenck has also stated that those toward the extraverted end of the continuum develop symptoms of the hysterical type during periods of emotional instability, while those toward the introverted end develop "dysthymic" disorders (anxiety, depression, and obsessive-compulsive).

If the writer understands Eysenck correctly, these relationships postulated by his theory are not in accord with the facts presented here. The measures of authoritarianism were shown to correlate negatively with the *Hy* (hysteria) scale and positively with the "dysthymic" scales (*D*, *Pt*), both correlations being contrary to predictions from Eysenck's theory. Two factor-analytic studies provide similar contradictory evidence as well as demonstrate that measures of authoritarianism have a considerable loading on the neuroticism factor. Tyler (20) performed a centroid factor analysis of fifteen MMPI scales, including *Pr*, on a college sample and found that *Pr* had its most substantial loading (.70) on the first factor, which he interpreted as "general maladjustment." The scale showing the highest correlation with *Pr* was *Pt*, which Eysenck considers to be a relatively pure measure of neuroticism. A Lawley-type factor analysis was carried out in this laboratory by Dr. M. I. Soueif on several MMPI scales (*K*,

Hy, *Pd*, *Pt*) and Guilford's factorially pure *D* (depression), *C* (cycloid) and *R* (rathymia) scales. (The *R* scale is regarded by Eysenck as one of the best measures of extraversion.) The first two factors in Soueif's analysis were neuroticism and introversion-extraversion. The MMPI scales with the largest factor loadings on neuroticism were *K* (-.64) and *Pt* (.85), both of which are highly correlated with authoritarianism. The *K* and *Pt* scales had comparatively small factor loadings on introversion-extraversion (.40 and .14 respectively). The *Hy* scale had a loading of .12 on the neuroticism factor and .77 on extraversion. But it has consistently shown negative correlations with measures of authoritarianism, which is exactly the opposite of what one would predict from Eysenck's theory.

SUMMARY

The MMPI was administered twice, with a one-year interval, to 712 college freshmen and to 114 seniors, who also took the California F (Fascism) scale. A discussion of the nature of the *Pr* (prejudice) scale of the MMPI and its relation to a number of other variables in a college sample are presented, along with a normalized *T* conversion table for *Pr*.

1. The distribution of *Pr* scores in the college sample was more skewed and constricted, with a piling up of low scores, than the distribution of scores in the high school group used in the derivation of the *Pr* scale.
2. The reliability of *Pr* (.81) compares favorably with that of other MMPI scales.
3. There was a significant decrease in mean *Pr* as students advance in college.
4. There were significant differences in mean *Pr* among students majoring in different fields.
5. *Pr* correlated significantly with the California F scale.
6. *Pr* was positively correlated with the *Hs*, *D*, *Pd*, *Pt*, *Sc*, and *Ma* scales, and negatively correlated with *K* and *Hy*.

These findings and those of several related studies are discussed as a means of psychologically characterizing the authoritarian personality. It was concluded that certain psychopathological factors are present in the authoritarian syndrome.

REFERENCES

1. ACKERMAN, N. W., & JAHODA, M. *Anti-Semitism and emotional disorder*. New York: Harper, 1950.
2. ADORNO, T. W., FRENKEL-BRUNSWIK, ELSE, LEVINSON, D. J., & SANFORD, R. N. *The authoritarian personality*. New York: Harper, 1950.
3. ALTUS, W. D., & TAPEJIAN, T. T. MMPI correlates of the California E-F Scale. *J. soc. Psychol.*, 1953, **38**, 145-149.
4. BRACKBILL, G., & LITTLE, K. B. MMPI correlates of the Taylor scale of manifest anxiety. *J. consult. Psychol.*, 1954, **18**, 433-436.
5. CHRISTIE, R., & JAHODA, MARIE (Eds.). *Studies in the scope and method of "The authoritarian personality"*. Glencoe, Ill.: Free Press, 1954.
6. COTTLE, W. C. *The MMPI, A review*. Lawrence, Kansas: Univer. of Kansas Pub., 1953.
7. EYSENCK, H. J. *The psychology of politics*. New York: Praeger, 1954.
8. FREDMAN, M., WEBSTER, H., & SANFORD, N. A study of authoritarianism and psychopathology. *J. Psychol.*, 1956, **41**, 315-322.
9. GOUGH, H. G. A new dimension of status: II. Relationship of the *St* scale to other variables. *Amer. sociol. Rev.*, 1948, **13**, 534-537.
10. GOUGH, H. G. Studies of social intolerance: I. Some psychological and sociological correlates of anti-Semitism. *J. soc. Psychol.*, 1951, **33**, 237-246.
11. GOUGH, H. G. Studies of social intolerance: II. A personality scale for anti-Semitism. *J. soc. Psychol.*, 1951, **33**, 247-255.
12. GOUGH, H. G. Studies of social intolerance: III. Relationship of the *Pr* scale to other variables. *J. soc. Psychol.*, 1951, **33**, 257-262.
13. GOUGH, H. G. Studies of social intolerance: IV. Related social attitudes. *J. soc. Psychol.*, 1951, **33**, 263-269.
14. HATHAWAY, S. R., & MEEHL, P. E. The Minnesota Multiphasic Personality Inventory. In *Military clinical psychology*, TM 8-242, AFM 160-45. Washington: U. S. Government Printing Office, 1951.
15. HIMMELHOCK, J. The dynamics of tolerance. Unpublished doctor's dissertation, Columbia Univer., 1952.
16. LEVINSON, D. J., & SANFORD, R. N. A scale for the measurement of anti-Semitism. *J. Psychol.*, 1944, **17**, 339-370.
17. MASLING, J. M. How neurotic is the authoritarian? *Amer. Psychologist*, 1953, **8**, 402-403. (Abstract)
18. MCKINLEY, J. C., HATHAWAY, S. R., & MEEHL, P. E. The Minnesota Multiphasic Personality Inventory: VI. The *K* scale. *J. consult. Psychol.*, 1948, **12**, 20-31.
19. REICHARD, SUZANNE. Rorschach study of prejudiced personality. *Amer. J. Orthopsychiat.*, 1948, **18**, 280-286.
20. TYLER, F. T. A factorial analysis of fifteen MMPI scales. *J. consult. Psychol.*, 1951, **15**, 451-456.
21. WHEELER, W. M., LITTLE, K. B., & LEHNER, G. F. The internal structure of the MMPI. *J. consult. Psychol.*, 1951, **15**, 134-141.