There are several reasons why one might expect intelligence and education to be related to ethnocentrism. One reason is primarily methodological: since all of the E-scale items (and most of the items in the E-F-PEC series) are negative, i.e., agreement represents a pro-ethnocentric stand, perhaps some of the less intelligent individuals make high scores not out of real conviction but simply out of suggestibility and lack of discernment. In answer to this point, it may be noted that we were primarily interested in measuring both active receptivity as well as a more passive suggestibility to antidemocratic ideology. Nevertheless, we should expect suggestibility to be but one—and far from the most important one—of the many factors showing some association with high scores on the E scale.

Various hypotheses and interpretations presented in other chapters have implied, directly or indirectly, that intelligence and ethnocentrism are negatively correlated, i.e., that the high scorers on E are somewhat less intelligent on the average than the low scorers. Thus, the analysis of the ideological as well as of the clinical material has suggested that ethnocentrism is related to stereotypy, rigidity, and concreteness in thinking (also see Rokeach (98)), to narrowness of the ego bounds, and to difficulty in grasping psychosocial explanations of social phenomena. Since these variables are at best only partial components of intelligence, and since they are only imperfectly (though significantly) related to ethnocentrism, we might expect a relatively low but consistent negative correlation between intelligence and ethnocentrism.

The correlation may be brought closer to zero by the operation of another factor: it has often been observed that an individual may function in a highly complex, abstract, and flexible manner in one area of life (e.g. in his occupation as a physical scientist, mechanic, or businessman), and in a completely contrasting—less intelligent—manner in his social outlook or in his family life. It is as if the basic intellectual capacity can express itself only in accord-
ance with certain emotional-motivational principles; it is free, indeed stim-
ulated, to act along certain lines, impeded and distorted to varying degrees
along other lines. Whatever the reasons, it is a matter of fact that many
individuals are inconsistent in their actual intellectual performance, and may
show certain "nonintelligent" (stereotyped, rigid) qualities in their social
thinking despite having a relatively high intelligence as it is ordinarily meas-
ured. Conversely, individuals of moderate or low "basic" intelligence may
be able to function realistically and flexibly in their social thinking. To the
extent that intelligence tests measure something more basic—unfortunately
it is not entirely clear what specific psychological functions they do measure
—their correlation with ethnocentrism may be lower than initially expected.
If the correlation were very high, above .4—.5, say, we should be inclined
to suspect that the scales are inadequate; it does not seem likely, on theo-
retical grounds, that intelligence per se plays so large a role in ideology.

The relation between ethnocentrism and education is also likely to be sig-
nificant but low. One of the main stated aims of our educational system is
the teaching of democratic values as expressed in our Constitution and in
other great documents. To the extent that we are succeeding in aims such as
these, ethnocentrism and years of education ought to be negatively cor-
related, that is, the more the education the less the ethnocentrism.

The above hypotheses are consistent with the results of previous studies
of prejudice and general liberalism-conservatism.¹

On the average, "liberals" (with respect to ideology regarding group rela-
tions, politics, religion, etc.) have been shown to be slightly more intelligent,
to receive better grades in college, to read more and to have greater
intellectual curiosity. While the differences are significant, there is of course
much overlap between the two extreme groups.

It was not feasible within the scope of the present research to administer
intelligence tests to the groups taking the questionnaire. Fortunately, such
tests had already been administered to some or all of the members of four
groups: Maritime School Men, Employment Service Men, Psychiatric Clinic
Men and Women, and San Quentin Men. No information was obtained in
our questionnaire regarding years of education; this question was omitted
partly because of the probable unreliability of the answers and partly because
of the fear that it might make the less educated subjects defensive about the
entire questionnaire. In some cases, e.g., the college students and the pro-
fessionals, the amount of schooling was relatively constant for the entire,
group. For two groups, the Psychiatric Clinic patients and the Maritime
School, the years of schooling had been determined in a way that seemed fairly
(though not entirely) reliable.

The data on intelligence are presented in Tables 1–3 (VIII), on education
in Tables 4 (VIII) and 5 (VIII). We may consider intelligence first.

¹ For reports and summaries see: Murphy, Murphy and Newcomb (85); Kerr (63).
For all three groups in Tables 1–3 (VIII), namely the Maritime School Men, Employment Service Men, and Psychiatric Clinic Men and Women, the average IQ is significantly above the general population average (usually by about one sigma); indeed, even the lowest scorer is, except in the third group, above the population mean. This fact, namely the restriction in the "range of talent," must be considered in evaluating the results. The correlations for the Maritime School Men, obtained with the AGCT (Army General Classification Test), are very similar to those obtained with the Otis Higher Form A Intelligence Test on the Employment Service Veteran Men. The correlations of these tests with the Ethnocentrism scale, Forms 45 and 40, range between —.02 and —.32, averaging above —.2. The correlations of E with the Mechanical, Reading and Arithmetical Comprehension Tests (Table 1 (VIII)) are slightly lower, averaging about —.1. These correlations, taken together, are statistically significant, that is, dependably above zero, at the 5 per cent level. It may be noted also that there are no positive correlations. Table 3 (VIII) gives the mean (Wechsler-Bellevue Intelligence Test, the Iowa Silent Reading Test, the Stanford Adult Arithmetical Reasoning Test.

### Table 1 (VIII)

**Correlations of the E and F Scales with Various Ability Tests (Maritime School Men)**

<table>
<thead>
<tr>
<th>Ability Test</th>
<th>Test Properties</th>
<th>Mean^2</th>
<th>S.D.</th>
<th>Range</th>
<th>Correlation with: b</th>
<th>AGCT</th>
<th>Eₐ</th>
<th>Eₐ+B</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGCT</td>
<td></td>
<td>126.7</td>
<td>8.98</td>
<td>102–153</td>
<td>--</td>
<td>-.02</td>
<td>-.20</td>
<td>-.20</td>
<td>-.20</td>
</tr>
<tr>
<td>Mechanical Comprehension</td>
<td></td>
<td>126.5</td>
<td>14.61</td>
<td>66–166</td>
<td>.25</td>
<td>-.17</td>
<td>.00</td>
<td>-.13</td>
<td></td>
</tr>
<tr>
<td>Reading Comprehension</td>
<td></td>
<td>92.5</td>
<td>13.04</td>
<td>57–121</td>
<td>.55</td>
<td>-.08</td>
<td>-.06</td>
<td>-.20</td>
<td></td>
</tr>
<tr>
<td>Arithmetical Comprehension</td>
<td></td>
<td>81.2</td>
<td>8.88</td>
<td>61–105</td>
<td>.59</td>
<td>-.06</td>
<td>-.16</td>
<td>-.16</td>
<td></td>
</tr>
</tbody>
</table>

^2The present means may be compared with the following population means: For the general population, the AGCT and Mechanical Comprehension Tests have means of 100. For the "high school graduate" population the Reading Comprehension and Arithmetical Comprehension Tests have means of 79. On all but the last-named test, therefore, the present sample is considerably above average.

bThe number of cases (N) involved in the correlations are as follows: Of the 343 subjects in the total sample, 342 received all of the ability tests, with the exception of four individuals who omitted the Reading Comprehension Test. The correlations involving AGCT and F, then, are based on an N of 342. The Eₐ Scale, contained in Form 40, has an N of 168, while Eₐ+B has an N of 178.
TABLE 2 (VIII)

CORRELATIONS OF THE E, F, AND PEC SCALES WITH
THE OTIS HIGHER FORM A INTELLIGENCE TEST
(EMPLOYMENT SERVICE VETERAN MEN)

<table>
<thead>
<tr>
<th>Otis Test Properties</th>
<th>Mean&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Range</th>
<th>Correlation of Otis with:&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Otis Raw Score</td>
<td>56.5</td>
<td>34–75</td>
<td>E&lt;sub&gt;A&lt;/sub&gt;: -.32</td>
</tr>
<tr>
<td>Otis IQ</td>
<td>114.5</td>
<td>92–133</td>
<td>E&lt;sub&gt;A+B&lt;/sub&gt;: -.22</td>
</tr>
<tr>
<td>Stanford-Binet IQ&lt;sup&gt;b&lt;/sup&gt;</td>
<td>129.5</td>
<td>108–140</td>
<td>F: -.48</td>
</tr>
</tbody>
</table>

<sup>a</sup>The mean Otis IQ of 114.5 is significantly above the population average of 100.0 (population S.D. is 10.0).

<sup>b</sup>The conversion of the Otis scores into Stanford-Binet IQ scores was done by means of a table prepared by Dr. E. E. Ghiselli. For the general population the Stanford-Binet has a mean of 100, an S.D. of 16.

<sup>c</sup>Test data were available for 104 of the 105 cases in this sample. The N is, then, 104 for the correlations with F and PEC. The N is also 104 for E<sub>A</sub>, since the E<sub>A</sub> scores of the subjects taking Form 45 as well as of those taking form 40 were used. The N is 50 in the case of E<sub>A+B</sub> (Form 45).

TABLE 3 (VIII)

MEAN WECHSLER-BELLEVUE IQ SCORE FOR EACH QUARTILE<sup>a</sup> OF THE ETHNOCENTRISM SCALE
(PSYCHIATRIC CLINIC MEN AND WOMEN)

<table>
<thead>
<tr>
<th>Form 45 E-Scale Quartiles</th>
<th>Range on E</th>
<th>N</th>
<th>Mean IQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low quartile</td>
<td>10–24</td>
<td>8</td>
<td>125.3</td>
</tr>
<tr>
<td>Low middle quartile</td>
<td>25–36</td>
<td>5</td>
<td>117.8</td>
</tr>
<tr>
<td>High middle quartile</td>
<td>37–50</td>
<td>13</td>
<td>113.9</td>
</tr>
<tr>
<td>High quartile</td>
<td>51–70</td>
<td>11</td>
<td>107.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>37</td>
<td>114.9</td>
</tr>
</tbody>
</table>

<sup>a</sup>The subjects represent only a part of each quartile. In all, 15 of the 50 men, and 22 of the 71 women, had received Wechsler-Bellevues. The men and women were similar with respect to proportion in each quartile, identical with respect to mean IQ. It is not clear why more upper-half than lower-half subjects have been tested. The mean of 114 approximates that for the patients generally.
Test) IQ for the four E scale quartiles, and we find the equivalent of a low negative correlation.

Tables 1–3 (VIII) indicate that, for individuals with IQ's of approximately 100 and above, there is a very low but dependable negative relationship between intelligence and ethnocentrism: the most ethnocentric subjects are, on the average, less intelligent than the least ethnocentric, while the middle scorers on E are intermediate in IQ.

Data on the San Quentin Men, not presented in the above tables, suggest a similar relation between E and IQ in groups having a wider intellectual range. Wechsler-Bellevue Test Scores were available on 77 of the 110 subjects in the San Quentin sample. This subsample had a mean E score of 4.68 and a Standard Deviation of 1.28, as compared with the total-sample mean of 4.61 and S. D. of 1.28. The mean Wechsler-Bellevue IQ (full scale) was 109.0, the S. D. 13.8, and the range 78–132. This subsample is, then, almost identical with the total (questionnaire) sample in E mean and S. D.; it is slightly more intelligent than the total prison population, whose mean IQ is just under 100. The obtained r between E and IQ was —.28. This value is of the same order of magnitude as those reported above for samples in which the IQ range was more constricted. It is, of course, not conclusive, since the tested sample may have been systematically biased in its selection. In addition, other factors such as educational and class level are probably contributing to this correlation, since they seem to be at least slightly related to both E and IQ. A conclusive study of the relation between IQ and E would have to partial out, or to keep constant, these other factors. Nevertheless, the series of negative r's, on a variety of groups and by means of a variety of intelligence tests, provides substantial evidence of a significant relation between E and IQ. That the correlation is greater than zero, and in a negative direction, is in keeping with previous studies as well as with the results of the present study regarding the role of stereotypy and rigidity in ethnocentrism. That the correlation is only moderately close—apparently in the range of —.2 to —.4—is evidence that intelligence is only one of many variables which determine E-scale scores.

Correlations between the Ability Tests and the F scale were computed for the Maritime School Men (Table 1 (VIII)) and the Employment Service Veterans (Table 2 (VIII)). In the former group the correlations range between —.13 and —.20 while in the latter the extremely high value of —.48 was obtained. It appears, then, that IQ is more closely related to F than to E although, except for the Veterans, the correlation is relatively small. Further study is required to determine whether or not the r of —.48 is spurious or exceptional. The higher correlations with F than with E might be explained on the basis of certain of the F clusters, e.g., superstition and stereotypy; correlations between IQ and the individual F items might well be obtained
in future research. The correlation of \( r = .16 \) between IQ and the PEC scale (Table 2 (VIII)) is consistent with other findings.

That the relation between intelligence and ethnocentrism is not very close is suggested also by the over-all group data. Thus, while the three groups in Tables 1–3 (VIII) are very similar in average IQ, they vary greatly in average E score. The Psychiatric Clinic patients have an E mean of 3.7, a full point below the means for the Maritime School and Veteran Men. Moreover, the latter groups, while extremely high in average IQ, are also among the most ethnocentric of all groups tested. It would seem, therefore, that high tested intelligence is no guarantee against the overall authoritarian pattern of ideology and personality.

Data on the relation of ethnocentrism to amount of education are presented in Tables 4 (VIII) and 5 (VIII). One of the most striking results is

<table>
<thead>
<tr>
<th>TABLE 4 (VIII)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEAN NUMBER OF YEARS OF EDUCATION FOR EACH</td>
</tr>
<tr>
<td>QUARTILE OF THE ETHNOCENTRISM SCALE</td>
</tr>
<tr>
<td>(PSYCHIATRIC CLINIC MEN AND WOMEN)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Form 45 E Scale Quartiles</th>
<th>Range on E</th>
<th>N(^a)</th>
<th>Mean Yrs. Education(^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low quartile</td>
<td>10–24</td>
<td>29</td>
<td>13.8</td>
</tr>
<tr>
<td>Low middle quartile</td>
<td>25–36</td>
<td>28</td>
<td>12.7</td>
</tr>
<tr>
<td>High middle quartile</td>
<td>37–50</td>
<td>27</td>
<td>11.8</td>
</tr>
<tr>
<td>High quartile</td>
<td>51–70</td>
<td>28</td>
<td>11.2</td>
</tr>
</tbody>
</table>

\(^a\)These data are based on 45 of the 50 men, 66 of the 71 women. The means for men and women separately were so similar that they were combined in order to increase the N.

\(^b\)One year has been added to the number of years of education in five cases where the individual had specialized training such as secretarial or accounting school.

that these two variables are much more closely related in the Psychiatric Clinic group than in the Maritime School group. The average number of years of education drops gradually but consistently (from 13.8 to 11.2) in the Clinic group as score on the E scale increases (Table 4 (VIII)). However, in the Maritime School data, computed in another manner, the changes are not so consistent. On the basis of the combined Forms 45 and 40 data, subjects with less than 12 years of education (i.e., not high school graduates) have the highest E mean, 4.9, while those with 12–14 years (there were no college graduates) had almost identical E means of about 4.6. However,
there is some question as to whether the results for the two Forms should be combined, since the results for each Form separately are not so clear-cut. In the Form 45 group there is no consistent trend, the subjects with 13 years of education having the highest E mean and the other educational levels varying only within a range of 0.1 points. In the Form 40 group, on the other hand, the 13-year level is the least ethnocentric, while the 14-year group vies with the less-than-12 for the most ethnocentric position. The only difference that holds up for both Forms is that between the 12 and the less-than-12 year levels, and this difference borders on the 5 per cent level of statistical significance.

Why is the relation between ethnocentrism and education more consistent in the Psychiatric Clinic group? One possibility is that the Maritime School members who had one or two years of college and then dropped out are systematically atypical, and that an unselected group of college students might be less ethnocentric. To the extent that this is true, a clear-cut relationship between ethnocentrism and education does exist. However, the relation in the case of the Psychiatric Clinic may be spuriously high, since the college students and college graduates in this sample are not a random sample of these educational levels. It is possible—though not yet demonstrated—that the college-trained patients are, to a greater degree than those who did not attend college, selected for willingness to recognize the need for, and to seek, psychological aid. To the extent that this is true, the relationship between ethnocentrism and education is less clear-cut than these results indicate.

One might venture the hypothesis that ethnocentrism is at least as closely related to the desired amount of education as to the actual amount. Thus the two Extension Classes (Forms 78 and 45), most of whose members were
adults having only 12 years or less of schooling, but trying to "learn something on the side" and perhaps even to obtain a college degree, had E means as low as those of the University of California students. There is also some clinical evidence to support this hypothesis. At any rate, examination of the various group means shows that two groups may have similar educational levels and very different E means, as well as similar E means and very different educational levels. For example, the University of California students and the George Washington University Students, with similar educational levels, are significantly different in E means (Form 78, A-S scale, and Form 40, E scale). Again, the Working-Class group, though similar in socio-economic and educational background to the San Quentin group, is significantly less ethnocentric (Form 45).

We may tentatively conclude that ethnocentrism shows a slight negative correlation with amount of education. It is likely, though far from a demonstrated fact, that college graduates are less ethnocentric than high school graduates, who are in turn less ethnocentric than those who did not complete high school. It is not clear which is more important: that the correlation is greater than zero, or that it is at best not far from zero. To those who urge education per se as a kind of panacea, the smallness of the correlation ought probably to be stressed. But this is not to deny the importance of education. It is, rather, to emphasize that our educational system, college as well as public school, is still far from realizing its potential strength as a social force in the service of democratic values. The reasons for this are outside the scope of the present research. It may also be pointed out that, even under the best educational conditions, exposure to the classroom is not enough, and that motivation to learn and receptivity to new ideas provide the only psychological soil in which democratic education can develop effectively.

In summary, ethnocentrism seems to have a low but statistically significant relation to both intelligence and education, the most educated and intelligent subjects being, on the average, the least ethnocentric. However, these variables were studied only secondarily in the present research, and convincing determination of their relation to ethnocentrism requires more extended sampling, particularly of the lower educational and intellectual levels. It is also necessary to control more adequately the operation of other variables such as class level, educational opportunity and educational motivation. Nevertheless, the present results do contradict seriously one of the commonly held theories of prejudice and fascism, namely, that they are supported out of simple stupidity, ignorance or confusion. It would seem, rather, that an autocratic social structure is best suited to the particular type of rationality exercised by the authoritarian personality. A promising field of future research is the study of what might be called "the dynamics of intelligence." For example, the intellectual functioning of ethnocentric individuals, even those with above-average IQ's, seems to be relatively rigid,
to work better in relation to things than to people, to be primarily extra-ceptive, and to become disrupted when required to deal with more psychological issues, especially those involving personal needs and emotions (anti-intraceptive).

As has been noted elsewhere (particularly in Chapter IV), the average IQ and the educational level of the entire sample used in the present research are probably somewhat above those of the general population, or, rather, above those of the urban middle class (our primary reference population). This sampling bias, together with that of age—our sample being somewhat younger than a representative sample would be—has probably resulted in our obtaining over-all means for the various scales which are slightly biased in the direction of being too low. However, the error seems to be less than might have at first been suspected. In addition, it is not likely that such sampling factors have distorted to any appreciable degree the relationships among the variables of ideology, personality, and group membership under investigation. Since we were primarily concerned with the causes and correlates of antidemocratic trends, that is, with correlations and differences, rather than with the average amount of any single trend per se, the diverse groups comprising the total sample provide, it would seem, an adequate basis for study.