TABLE 4. EMPLOYMENT STATUS WITH FAMILY ORGANIZATION INDICES, MINUS NEUROTIC DIAGNOSIS

Family Organization Variable	Employment Status		
	N	X2*	P <
Excessive marital-pair conflict	111	.00	.99
Husband possesses unusual habits	108	.50	.50
3. Lower socio-economic status	110	.02	.90
4. Multiple marriages of wife	111	.01	.95
5. Multiple marriages of husband	111	.01	.95

^{*} Two-tailed tests.

Leavy and Freedman note that "economic life can be shown to have great significance as a determinant of neurosis." 11 In the cases they studied, however, "references to occupation as a source of emotional disturbance were not frequent." 12 What they did find was that the specific meaning of stress in the work situation occurs in the transfer of more deeply determined personal conflicts into the work situation. "Employment provided a demonstrable release for energies which were themselves directed by neurotic conflict." 13 They further note how the cultural evaluation of work provides a screen of acceptability for compulsive over-activity, the neurotic nature of which may be evident only after the individual develops a disabling mental disorder. They conclude that in many instances economic competition may act as a pathogenic agency in the development of psychoneurosis.

Statements in the literature of sociology about the effects of mothers' employment upon family life may not be as contradictory as they first seem. Perhaps women work for two types of reasons. It would seem that if working permits both personal expression of interests and skills and economic contribution to family life, then employment of the mother may promote family cohesion. Moreover, if women become employed in order to express neurotic pressures from within their own personalities, then employment of the mother may lead to a breakdown in the quality of family interaction. In noting mothers' employment, therefore, sociologists may be citing a very complex phenomenon which has only a contingent effect upon family life. The data of this study, as well as the quantitative and qualitative changes that have taken place in employment of mothers, seem to lead to this conclusion.

EARLY FAMILIAL EXPERIENCES AND BIGOTRY *

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The concept of the "authoritarian" or "bigoted" personality has proven to be one of the most germinal and controversial ideas produced by post-war social science. The original work of the "Berkeley group" indicated that racial and religious prejudice was strongly correlated with "authoritarian" political, religious, and social beliefs; and that these beliefs, in turn, were reflections of deep personality trends.1 This view, that prejudice serves an important "functional" role for the individual, provoked a flood of empirical research. Over the last decade, numerous investigators have examined the relation between bigotry and authoritarianism, and such other traits as the person's tendency to dichotomize his world, intolerance of cognitive ambiguity, desire for status, patriotism, and participation in political affairs.

Numerous critics effectively questioned the methodology of the studies. Indeed, in 1954, an entire book, Studies in the Scope and Method of the Authoritarian Personality, raised a variety of important issues: Was the original sample disproportionately loaded with well-educated, middle-class people? Were the questionnaires constructed in a politically biased fashion? Should the generalizations have been based on the extremes of a sample? Were causal inferences drawn from pre-conceived premises? Were the questionnaires properly validated? Did the method lead to categorizing as "authoritarian"

¹¹ Stanley A. Leavy, and Lawrence Z. Freedman, "Psychoneurosis and Economic Life," Social Problems, 4 (July, 1956), pp. 55-67.

¹² Ibid., p. 67.

¹⁸ Ibid.

^{*}The authors wish to express their gratitude to the Ella Lyman Cabot Foundation, the Harvard Laboratory of Social Relations, and National Institutes of Mental Health (grant M-2647) for their generous financial support of this research.

¹ T. W. Adorno et al., The Authoritarian Personality, New York: Harper, 1950.

those people who simply had a spineless tendency to accept any stereotype, regardless of content? 2

One of the more debatable (and most basic) aspects of the research concerns generalizations about the type of family environment which creates prejudiced individuals. After intensively interviewing a sample of "authoritarian" and "tolerant" individuals, Adorno and his colleagues concluded that the bigoted are highly ambivalent toward their parents. Although superficially glorified, the parents are implicitly depicted as stern, moralistic, and rejecting. Thus, it appeared that a specific type of family tends to produce authoritarians-a most crucial finding, if true, since it might have important implications for the combating of prejudice. Nevertheless, as Hyman and Sheatsley point out, this conclusion has an Achilles heel: the generalizations were drawn from retrospective evidence, and reports about the family came from adult authoritarians.

As Hyman and Sheatsley argue, "In the absence of any validating data, one is compelled to qualify very seriously any conclusions which relate to the influence of actual childhood upon prejudice." 3 The available evidence fails to distinguish biased or falsified views from a true picture of early family life; this, indeed, was recognized by the researcher's when they commented, "It is difficult to say how much the image of a parent corresponds to reality and how much it is a subjective conception." 4

Further research by other investigators indicates that the original work might, after all, reveal an objective portrait of the background of bigots. Harris, Gough, and Martin, for example, analyzed prejudice in a group of 240 young children and, simultaneously, secured information from the children's parents concerning their child-rearing beliefs.5 Their research demonstrates that the parents of prejudiced children are more likely to demand strict obedience, that they are repressive of sex play, and that they react to temper tantrums with aggression. The parents appear to be stern and

² Richard Christie and Marie Jahoda, Studies in the Scope and Method of the Authoritarian Personality, Glencoe, Ill.: Free Press, 1954.

punitive. Independently, Ackerman and Jahoda examined a group of prejudiced persons undergoing psychoanalysis. They found a high incidence of familial conflict, sterness, and rejection.6

Gordon Allport, after reviewing this material, concluded that ". . . a home that is suppressive, harsh, or critical-where the parents' word is law-is more likely to prepare the groundwork for group prejudice." 7 Cautiously, he proposed some hypotheses concerning the familial basis of bigotry: "Although we cannot yet be dogmatic about the matter, it seems very likely that rejective, neglectful, and inconsistent styles of training tend to lead to the development of prejudice children who are too harshly treated, severely punished, or continually criticized are more likely to develop personalities wherein group prejudice plays a prominent part." 8

Since none of the relevant studies actually traces a sample of prejudiced individuals from childhood to adulthood, one hesitates to accept even these qualified generalizations. The purpose of this paper is to report the first longitudinal study of the familial basis of prejudice -a study of 45 males whose family environments were first observed between 1937 and 1940 (when the subjects were nine to 12 years of age). In 1948, when the boys had reached early manhood, they were traced and interviewed concerning their attitudes toward Jews and Negroes. All of the subjects came from a lower-class background. This feature of the sample, we believe, is of major importance, for previous studies have concentrated on middleclass individuals.

THE BACKGROUND OF THE STUDY

The opportunity to analyze the origins of prejudice in these men was provided by the Cambridge-Somerville Youth Study, a pioneering experiment in the prevention of delinquency. In the middle 1930s, 650 lower-class boys were selected from the schools of Cambridge and Somerville, Massachusetts. Half of the cases were originally selected as potential delinquents and half as "normal" subjects. Half of each group underwent counseling and other forms of treatment; the others formed a control group for purposes of observation. Each boy's environment, physical constitution, and

⁸ Herbert Hyman and Paul Sheatsley, "A Methodological Critique," in Christie and Jahoda, op. cit., p. 100.

Adorno et al., op. cit., p. 358.

⁵ D. B. Harris, H. G. Gough, and W. E. Martin, "Children's Ethnic Attitudes: II, Relationships to Parental Beliefs Concerning Child Training," Child Development, 21 (July, 1950) pp. 169-181. See also Else Frenkel-Brunswick, "Patterns of Social and Cognitive Outlook in Children and Parents," American Journal of Orthopsychiatry, 21 (August, 1951) pp. 543-558.

⁶ N. W. Ackerman and Marie Jahoda, Anti-Semitism and Emotional Disorder, New York: Harper, 1950.

Gordon W. Allport, The Nature of Prejudice, Cambridge: Addison-Wesley, 1954, p. 298.

⁸ Ibid., pp. 299-300.

personality were investigated by a staff of social workers, psychiatrists, and psychologists.9 In 1948 and again in 1956, various aspects of the adult behavior of these subjects—their rates of crime, alcoholism, and mental disease—were analyzed through interviews and community records.

The measure of prejudice. One part of this follow-up study was devoted to the boys' attitudes toward Negroes and Jews. In 1948, after the project, members of the staff interviewed some 200 boys concerning their activities, beliefs, and attitudes. Only 63 subjects, in the interviews, were directly questioned about their attitudes toward minorities. (The interviewers had not been specifically instructed to secure information on prejudice.) When a boy was so questioned, the interviewer inquired, "And what do you think about the Negroes in the next block?" Or, "Do you find that the Negroes who work in your factory do a good job?" Or, "What do you think of the Jews in the store downtown?" The questions were presented casually, placed in the context of the person's actual social experience, and emerged spontaneously from previous conversation. Usually, attitudes toward both Negroes and Jews were ascertained. In essentials, the questioning re-sembles the method used by Bettleheim and Janowitz in their classic study of veterans, Dynamics of Prejudice.10 The responses to these questions fall into three categories:

- 1. Nineteen individuals were openly antagonistic toward minorities, stating, for example, "Those dirty Negroes are trying to take my job away—we have to get rid of them to keep the country clean" or "Niggers think only about sex, jazz, and fighting—I keep away from them. They are dangerous." These outspoken bigots both feared and hated minorities; they viewed the world as a battle to keep Jews and Negroes "in their place;" they accepted all of the usual stereotypes and, if their word can be trusted, acted aggressively on the basis of them.
- 2. Twenty-three cases, the prejudiced, did not reveal overt antagonism; nevertheless, they adhered to negative stereotypes about minority groups. Typically, they would respond, "I can take them or leave them. I don't like them around me much—they have a bad smell, you know" or "Jews? Well, they are all right, except that they try to gyp you. They are too smart. But if you watch them like a hawk, they are O.K." Some of these prejudiced individuals

⁹ Edwin Powers and Helen Witmer, An Experiment in the Prevention of Delinquency, New York: Columbia University Press, 1951. may have behaved in an openly aggressive fashion, but this was not revealed in the interviews.

3. Twenty-one people could be regarded as apparently tolerant. When questioned, they uniformly replied in an unprejudiced manner; they did not, apparently, accept negative stereotypes nor did they unveil any direct antagonism. Characteristic responses were, "Negroes are just like us. They are no different. Quite a few work in the restaurant with me and I get along fine. They have a good sense of humor" and "It makes me mad to hear people talk against the Jews. They don't do any harm but they are always kicked around. You don't get any criminals coming from their homes." Of course, caution is required in analyzing this group of "tolerant" individuals. For some, their responses may have revealed their real beliefs. Others may have answered in a fashion they thought to be acceptable or agreeable to the interviewer.11 It may be that certain of these subjects were cleverly hiding their real aggressive feelings, for fear of retribution. Superficially, at least, all of them appeared to be tolerant. Similarly, the individuals who were verbally "antagonistic" or "prejudiced" may not have behaved in an overtly discriminatory manner.

Two independent raters who re-read and categorized 30 randomly selected interviews reached agreement in 29 cases—an indication that the responses possessed a high degree of inter-rater reliability.

From the original 63 interviews, 18 cases were eliminated. Four of these were Negro and, as victims of bigotry, were unsuitable for an analysis of the origins of prejudice. The remaining 14 subjects came from middle-class families with more schooling than the rest of the sample; these were dropped to insure a distinctly lower-class sample. Previous studies indicate that both education and social class are related to bigotry. Since we wished to concentrate on the possible familial origins of prejudice (and since prior studies are concerned with middle-class subjects), it seemed desirable to eliminate as many "contaminating" influences as possible.

Thus, we were furnished with a sample of 45 Northern, urban males, all of lower-class back-

¹⁰ Bruno Bettleheim and Morris Janowitz, Dynamics of Prejudice, New York: Harper, 1950.

¹¹ None of the interviewers was Jewish or Negro. They did, however, represent an "official," middleclass agency.

¹² Hyman and Sheatsley, op. cit. In our sample, too, there was a slight tendency for the middle-class subjects to appear unprejudiced: seven were "apparently tolerant," four were "prejudiced," and three were "openly antagonistic."

ground (that is, their fathers had attended only grade school, they held jobs as skilled or unskilled workers, and they lived in "transitional" neighborhoods). The subjects were 20 years old at the time of the interviews, all of them had attended a regular or vocational high school, and none had gone to college.

The measures of family relationships. At some time between 1935 and 1940, the homes of these boys were visited by trained social workers. The latter were charged with reporting the parents' behavior in child training and discipline, their affectional relation to the child, the attitudes of the parents toward one another, and their values. Most homes were visited twice.18 Additional information was secured from local schools, employers, churches, and social agencies. At the time of the home visits, the staff was unaware that the material would later be used for an analysis of prejudice. Thus, the possibility of conscious or unconscious bias in order to conform to pre-conceived theories was minimized.

Between 1955 and 1957, this raw information was re-examined by the authors and their colleagues. A set of ratings concerning the familial environment was developed and each case was classified according to the same set of variables. This rating system is described extensively elsewhere. An example of one typical rating—the degree of parental conflict within the family—illustrates the method. On the basis of the interviews, the families were divided into the following categories:

- (a) Homes of intense conflict were marked by continual quarreling and parental disagreement on almost all issues. The conflict was open and often resulted in brutal verbal or physical abuse.
- (b) Homes of some conflict gave evidence of some basic dissension, the parents lacked respect for each other and, at times, their antagonism broke into the open. Nevertheless, a facade of peacefulness was generally maintained and, in certain areas, the parents were in agreement.
- (c) In homes of no conflict, to the interviewers' knowledge, the parents lived amiably

together, agreed on basic issues, and never openly attacked each other.

A similar set of ratings, based on observation of other aspects of family behavior, was made. The following categories—all of presumed relevance to the genesis of prejudice—were established.

- Nature of parental unit (united or separated by death, divorce, separation, and so on).
- Parental affection for each other (affectionate, sporadically affectionate, indifferent, openly antagonistic).
- Parental dominance (father, mother, equal roles in family).
- Parents' attitudes toward boy (affectionate, alternating, rejecting).
- Parents' role in family (dictator, leader, passive).
- Parents' deviance (criminal, alcoholic, promiscuous).
- Parents' aggression (unrestrained, normal, inhibited).
- Parents' reaction to crises (aggressive, escapist, realistic).
- Parents' values (achievement, popularity, status, security, enjoyment).
- Parents' disciplinary technique (physically punitive, non-punitive).
- Consistency of parents' disciplinary technique (consistent, erratic, lax).

Two raters, independently classifying 30 cases, reached an average of 85 per cent agreement. The degree of inter-rater reliability ranged from 73.3 per cent agreement (concerning parental conflict) to 96.7 per cent (concerning the nature of the family unit).

To sumarmize: 45 lower-class boys were interviewed in 1948 concerning their attitudes toward Negroes and Jews. Fourteen of them appeared to be "openly antagonistic" toward minorities, 17 "prejudiced" but not necessarily aggressive, and 14 "tolerant." Between 1937 and 1940, information on their family backgrounds, secured through interviews with the parents and material furnished by community agencies, was categorized into a set of variables descriptive of the familial environment. The information on prejudice and early environment, each, was independently gathered; the investigators did not know that the material would be used for a study of prejudice, nor were they aware of the hypotheses to be tested.

Since the number of cases is small, the results of this study must be tentative. Nevertheless, they may have significance for the analysis of prejudice. Since the research represents the first longitudinal study in this specific area, the difficulties inherent in cross-sectional and retrospective studies have been avoided.

¹³ The 45 cases were members of the Cambridge-Somerville "control" group. Information on their families was not as detailed and probably not as valid as that obtained for the "treatment" group, whose members were regularly observed over a five-year period.

¹⁴ William McCord and Joan McCord, with Irving Zola, Origins of Crime, New York: Columbia University Press, 1959; McCord and McCord, with Jon Gudeman, Origins of Alcoholism, Stanford: Stanford University Press, 1960.

RESULTS

The findings are uniformly negative. The familial backgrounds of the openly antagonistic, the prejudiced, and the apparently tolerant men do not differ significantly on any variable. Only the slightest of trends distinguish the bigots from the others. Thus, the generalizations proposed in The Authoritarian Personality and other studies—that bigots are more likely to come from broken homes, conflictful families, an aggressive, punitive, suppressive background; or are more apt to have been subjected to inconsistent and harsh modes of rearing—are not confirmed for the lower class by our data.

Since this research contradicts the findings of well conceived and ably executed projects, the results should be interpreted with caution. Although a number of explanations might be proposed-that the results are due to deficiencies in the measure of prejudice or in the measure of early family life, or that they are due to peculiarities in the sample-we believe that the most reasonable explanation is one that rests on the distinction between prejudice based on a need to conform and prejudice that has functional significance for the individual, a form of bigotry which emerges from deep personality characteristics. This distinction is made by Allport, who writes that ". . . some prejudices are merely conformative, mildly ethnocentric, and essentially unrelated to the personality as a whole;" but in some people, prejudice ". . . is often lock-stitched into the very fabric of life." 15 It would follow from this position that "character-conditioned" prejudice is produced by unique and presumably pathological, familial environments, while "conformist" prejudice is not necessarily correlated with a particular type of family structure. We believe that the prejudice found in the present sample is of the "conformist" type-based on adherence to a generally prejudiced lowerclass culture.

Research using national samples has demonstrated that authoritarian, stereotyped, or bigoted attitudes are found to be pervasive in the lower-class, relatively uneducated segment of the American population. 16 Since our sample was drawn exclusively from this group, one can reasonably argue that prejudice in these subjects is merely a reflection of a general set of attitudes characteristic of the American lower class. By this interpretation, the differences which appeared in the interviews in the apparent virulence of prejudice-overtly antagonistic or superficially tolerent-would not be attributable to familial experiences, but rather to such other variables as frustrating adult experience, contact with minorities, degree of education in adulthood, and the like. Undoubtedly, the "tolerant" individuals in the sample underwent certain experiences (presumably in adulthood) which led them to reject the dominant values of their social milieu.

Previous studies of the familial origins of prejudice mostly deal with middle-class people. In this group (at least within the last few decades) tolerance has become an ideal, while bigotry is disapproved. Therefore, prejudice in the middle class presumably originates more often in the "authoritarian" syndrome of personality traits, which stems from harsh socialization, a heightened degree of internal stress, and the example of rigid, authoritarian parents. This intensified degree of internal stress leads the middle-class person to seek a scapegoat for his anger and to establish order in a world which he perceives as inherently threatening. Prejudice in the middle class, then, can be regarded as a deviant pattern, which requires a unique kind of preparation within the early family environment. Consequently, within the middle class, correlations can be derived between modes of family life and later prejudice.

Within the lower class, on the other hand, "collective stress" is continually present; pervasive socio-economic frustrations are experienced by all members of the lower class. This situation, suggested at least by the results of the public opinion polls, creates a generalized "scapegoating" tendency—a willingness to accept stereotypes and to respond to the environment with aggression. The educational deprivation of this group undoubtedly contributes to the tendency to rigidify the social order unrealistically.

In sum: Prejudice in the American lower class is likely to be based on acceptance of a generally stereotyped culture, unrelated to specific personality needs or to unique familial environments. Prejudice in the American middle class would appear to be "functional" in nature, a reflection of unique personality patterns condi-

¹⁵ Allport, op. cit., pp. 395, 408. This distinction is to be found elsewhere—see, e.g., Robert M. Mac-Iver, The More Perfect Union, New York: Mac-millan, 1948, pp. 195-207; MacIver and Charles H. Page, Society, New York: Rinehart, 1949, pp. 410-411; Robert K. Merton, "Discrimination and the American Creed," in R. M. MacIver, editor, Discrimination and National Welfare, New York: Harper, 1949, pp. 99-126.

¹⁶ See Hyman and Sheatsley, op. cit., pp. 169-172,

for a summary of this research. See also Seymour Martin Lipset, "Democracy and Working-Class Authoritarianism," American Sociological Review, 24 (August, 1959), pp. 482-501.

tioned by certain frustrating familial experiences.¹⁷ Thus, the incidence of prejudice within the lower class appears to be the result of adult, rather than childhood, experiences.

This conclusion of course is merely an hypothesis. The small size of the sample and the fact that negative results can be interpreted in different ways require that the conclusion be hedged with several qualifications. Nevertheless, if this interpretation is supported by more extensive studies, it would provide some hopeful implications. For, if prejudice in the lower class is "conformist" in nature and not deeply embedded in early familial experiences, economic and educational advances offer hope of changing the level of bigotry in American life.

ELECTRONIC PROCESSING OF SOCIO-METRIC DATA FOR GROUPS UP TO 1,000 IN SIZE *

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AND

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The potentialities of sociometric data for objective description of group structure are greatly enhanced by electronic computers. Even with punched-card techniques, the procedures necessary for processing data on groups over 100 in size have been non-objective or cumbersome. The speed of computers can help to

17 Further support for this position derives from an analysis of the personalities of the 45 subjects. Ratings were made of their characteristics in childhood. When these were related to the measure of prejudice, it was found that the openly antagonistic, the prejudiced, and the apparently tolerant men did not differ in personality traits in any significant way. It should also be noted that the attitudes of the subjects towards their parents did not differ—that is, the ambivalence toward parents discovered in adult authoritarians was not characteristic of the "openly antagonistic" group in childhood.

*Revised version of a paper read at the annual meeting of the Midwest Sociological Society, April, 1959. The authors are grateful to the members of the staff of the Operations Analysis Laboratory of the University of Chicago for their cooperation in the application of the Univac to this analysis, and to the United States Office of Education and the Social Science Research Committee of the University of Chicago for financial aid.

¹ Cf. Gardner Lindzey and Edgar F. Borgatta, "Sociometric Measurement," in G. Lindzey, editor, Handbook of Social Psychology, Cambridge: Addison-Wesley, 1954, Vol. 1, p. 417. remedy this situation, since operations that formerly required months can now be done in minutes. Moreover, electronic computation forces the researcher to state his procedures in precise, objective form in the program, as the computer cannot stop continually for subjective judgments.

One of the major problems in analyzing the structure of social groups of 50 or more persons is to identify subgroups of individuals who associate with one another. This problem arises in characterizing the informal social structures of communities, student bodies, and similar groups. The present approach to this problem involves, first, the selection of mutual choices from among all choices given, and, second, the tempt to utilize these choices so as to reconstruct the total social configuration.

This paper is a report on the results achieved, and the new problems revealed, in a year's experience with a series of Univac programs. These programs perform the following functions: (a) selection of mutual choices from sociometric data; (b) permutation of rows and columns of the sociomatrix so as to group mutual choices near the principal diagonal; and (c) calculation of certain characteristics of the resulting configuration for use in further analysis.

SELECTION OF MUTUAL CHOICES

The sociometric choices of a group may be expressed as a matrix of zeros and ones, representing non-choices and choices. Those choices which are reciprocated (mutual) correspond to pairs of matrix elements which are symmetrical with respect to the main diagonal; IBM procedures have been devised for this selection.² But in the present application, rapid processing was desired for the choices of 20 groups, each involving 100 to 900 persons; IBM techniques seemed to be unnecessarily slow and cumbersome.

The program used to select mutual choices effectively selects these symmetrical elements of the sociomatrix. But here, as in all other such applications, the limitations of the computer must be considered: the entire sociomatrix, with its many zero entries, cannot and need not be stored in the rapid-access memory of the Univac.³ Only the serial numbers ("names") of

² See Corlin O. Beum and Joan H. Criswell, "Application of Machine Tabulation Methods to Sociometric Data," Sociometry, 10 (August, 1947), pp. 227-232.

B The matrix as considered here consists only of zero and unity entries; no negative choices or rejections are considered.