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SOCIAL PSYCHOLOGICAL EFFECTS ON LABOR SUPPLY  
IN THE NEW JERSEY-PENNSYLVANIA EXPERIMENT

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## ABSTRACT

Data from the first 18 months of the New Jersey-Pennsylvania Negative Income Tax Experiment are used to examine the effect of social psychological variables on the labor force participation of male heads of households. In the context of the culture of poverty theories, a set of attitudinal variables presumably related to work and other relevant personality orientations which the poor allegedly exhibit are hypothesized to have a work disincentive effect among the experimental group. The results show that, in general, those social psychological variables have no significant effect on work behavior, even when they are taken together as an indicator of the "most pathological." Hence, these data do not support the negative predictions of the culture of poverty theories, nor is there any indication that the efficacy of negative income tax programs would be encumbered by the psychological characteristics of the poor.

## Introduction

The purpose of the New Jersey-Pennsylvania Negative Income Tax Experiment (NIT) is to study the impact of income maintenance programs on the labor force response of the "working poor"<sup>1</sup> (Watts, 1969). The major proposition which the experiment was designed to investigate is that the primary effect of income maintenance in this population would be to decrease labor force participation. This expectation derives from static economic theory (e.g., Green, 1968; Kesselman, 1969) or what is also called "work-leisure choice" theory. The argument is simply that, given the choice of substituting leisure for work at the same level of income, most persons would prefer leisure. Hence, maintaining incomes with some NIT scheme is expected to decrease the overall labor force response of the experimental families.

Preliminary results from the experiment (Elesh, 1970; McCarthy, 1971; Watts, 1970; 1971; 1972) have generally not supported this expectation. The most recent data, which cover the first 18 months of the study, show no significant control-experimental differences in family earnings, a slight decrease in number of family workers employed and total hours worked per family for the experimental group, offset by higher average hourly earnings for experimental families. No significant differences have appeared for the work response of male heads, the primary labor force participants.

Sociologists who have examined these initial data have suggested that a wide variety of sociological and social psychological factors may be operating to confound the simple predictions of the "work-leisure choice" hypothesis (Elesh, 1970; McCarthy, 1971; Spilerman and Elesh, 1971). Values, attitudes, and social psychological traits may differentially affect the responses of the experimental families to the program:

for example, persons with high mobility aspirations may increase their labor force participation as their maintained income affords more economic flexibility, whereas persons without such aspirations may respond as the simple model predicts. It is unlikely, moreover, that the poverty population is homogeneous with regard to these traits (Spilerman and Elesh, 1971). Aggregating experimental effects across a psychologically heterogeneous population, then, may account for the overall finding of no significant experimentally induced differences, even though individual variation in response may be present. Put in other terms, the suggestion has been to locate the valuational and social psychological contexts in which the experiment can be expected to produce the predicted results. Similarly, Spilerman and Elesh "propose that future research should be directed at identifying the characteristic types of adaptations [of labor force response] which are likely to occur, and associating particular groups in poverty with each adaptation" (1971: 360).

Exhortations to examine possible intervening social psychological processes are standard among sociologists, but recently even economists have begun to voice similar concerns. Economists have suggested that the decision whether and how much to work, may involve more than a simple preference for leisure rather than work (e.g., Conlisk, 1968; Morgan, 1971).<sup>2</sup> "Motivation" is one such variable that has been proposed. Conlisk, for example, suggests that since motivation to work is itself a function of the individual's lagged income, maintaining incomes through an NIT scheme may serve to raise motivations and consequently labor force participation. Hence, as he says, "the negative effect on work incentive predicted by the static theory . . . may, after the passage of time, be more than outweighed by

the positive motivation effect" (1968:326). This "positive motivation effect" represents the combined influence of a number of variables, one of which is economic aspirations, assumed to be affected by past levels of income. Another is the so-called "taste" effect, the economist's concept which includes any attitudes and values that may account for individual preferences for economic alternatives, for example, the preference for leisure instead of work (Bowen and Finegan, 1969).

Morgan (1971) has also urged the inclusion of intervening attitudinal responses in the general theoretical model which predicts changes in work behavior as a function of income maintenance experimental manipulations. He suggests that researchers "concern themselves with measuring more of the intervening variables in the process" (1971:41). Among those intervening variables are attitudes, especially work-related attitudes. Morgan stresses the need to examine these variables in conjunction with other variables in the model, in order to better understand the processes by which individuals respond to the experiments.

The utility of suggestions to attend to intervening processes and traits, however, is diminished by the paucity of social psychological knowledge of the poor. Despite the increase of research in this area, much of it made popular by the War on Poverty, our understanding of the distribution, saliency, and effects of valuational, attitudinal, and personality variables among the poor population is scant and inconclusive (Allen, 1970; Blum and Rossi, 1968; Neff, 1968). Neff, for example, states:

. . . [A]s soon as we begin to ask ourselves serious questions concerning the psychology of poverty--what it is that the poor person thinks, feels, believes, desires--we are forced to fall back on the doubtful resources of speculation, guesswork, and remote inference . . . (1968:247).

Similarly, Allen concludes that "a considerable number of the data are ambiguous at best and overwhelmingly nonsupportive at worst. Many presumed relationships between personality characteristics and poverty simply are not supported by reliable data" (1970:373).

The New Jersey-Pennsylvania experiment offers a large amount of data which will enable an examination of the alleged social psychological characteristics of the poor and an assessment of the role of these characteristics in the determination of the work response. Following the leads of the works reviewed above, this paper offers an account of the influence of social psychological variables in the model of labor force participation in the NIT setting. The work response of male heads of households is examined by introducing a set of attitudinal variables presumably related to work and other relevant personal orientations into a modified version of Watts's (1971) basic model. Wherever possible, the literature on each of these separate variables is examined for its utility in making predictions about the labor force behavior of the working poor. Since most of these variables have been examined in contexts which bear little relation to the situation of the poor (especially in "stable" working-class and middle-class settings), a more general organizing perspective is needed to provide theoretical justification for those predictions. Such a perspective is afforded by the theory of the "culture of poverty." The culture of poverty theorists propose that a key feature of the poor is their participation in a deviant subculture, that is, their embracing a set of values which do not conform to those of the larger society. These deviant values, rather than lack of income, are taken to define the poor and to impose limits on the efficacy of social welfare programs, especially those such as NIT, which increase income but do not deal

with the inhibiting values and character structure of the poor. The characteristics which the poor allegedly exhibit such as anomie, strong present-time orientation, and lack of mobility aspirations, bear a convenient resemblance to the range of variables suggested in the works reviewed above as possibly intervening between the experiment and its effect. As such, the culture of poverty thesis provides the necessary integrating perspective in that it allows these attitudinal variables to be directly translated into predictions about the labor force response of the poor. Following is a brief review of the general dimensions of the culture of poverty approach and its implications for income maintenance programs, especially to the anticipated effects of NIT.

#### The Culture of Poverty Approach

The culture of poverty theory maintains that the poor--or a minority of the poor population<sup>3</sup>--have a distinct culture which differentiates them from the rest of the society (Gladwin, 1961; Herzog, 1963; Lewis, 1961; 1964; 1966a; 1966b). Lewis contends that a crucial element in the culture of poverty is the lack of integration of the poor into the major institutions of the society, and, particularly, lack of integration into the values which these institutions embody (1966a). He reduces a 70-trait list which he feels characterizes the poor into four main dimensions. One dimension represents the attitudes, values, and character structure of the poor. Among the elements of this dimension are:

. . . a strong feeling of fatalism, helplessness, dependence, and inferiority, . . . a high incidence of weak ego structures, . . . a strong present time orientation with relatively little disposition to defer gratification and plan for the future, and a high tolerance for psychological pathology of all kinds (1966a: 23).

Elsewhere, Lewis reiterates that fatalism and a low level of aspiration are key traits for the subculture (1966b:11).

In his assessment of the culture of poverty theories Valentine (1968) notes that a negative portrayal of the characteristics, values and behaviors of the poor is not limited to the culture of poverty theorists; rather, similar descriptions are found in most theories of lower-class culture. For example, in an essay which specifically addresses work-related issues among lower-class black youth, Himes writes about their exclusion from the work ethos:

. . . workers who are restricted to the fringes of the occupational structure tend to be excluded from the tenets and rationalizations of the work ethos. They cannot perceive the linkage between effort and advancement . . . Hard work and extra effort may be a necessary condition of keeping a job. But neither hard work nor self-improvement leads to a promotion. What then is the value of hard work, extra effort, and self-improvement? . . . In spite of the teachings of social institutions and the mass media, they believe that work is simply work, an unpleasant though necessary condition of staying alive. They go to the job in the morning with reluctance and escape from it at day's end with relief (1965:387; see also Liebow, 1967).

The implications of the culture of poverty theories for income maintenance programs are clear. In a frequently quoted passage, Lewis states:

By the time children are six or seven they have usually absorbed the basic attitudes and values of their subculture. Thereafter they are psychologically unready to take full advantage of changing conditions or improving opportunities that may develop in their lifetime [sic] (1966a:21).

Hence, economic approaches to poverty prove insufficient. Lewis suggests psychiatric treatment as one solution to the culture of poverty (1966a). More directly relevant to work incentives in an NIT program, one implication of this view is that the provision of transfer payments would result in a disincentive effect or perhaps total withdrawal from the labor force, especially among that segment of the poor most integrated into culture of poverty. Since this segment of the poor does not hold the "right" values and aspirations with regard to work, or as Himes would have it, since the poor only work in order to stay alive and seek to "escape from it at day's end with relief," one would expect

that the sense of security which the payments provide would be sufficient reason for leaving their unvalued and unworthy jobs.<sup>4</sup> Moreover, the "tangle of pathologies" which is reputed to constitute the psychological core of the poor, including such key traits as strong present time orientation, further suggests that it would be unreasonable to expect a work incentive effect.

Although these pessimistic predictions derived from the theory are not consistent with the initial results of the experiment, the theory may nonetheless offer insights into the dynamics of work behavior among the experimental families. It is possible, for instance, that the disincentive effect predicted by the simple static model will only be apparent among that segment of the poor population which exhibits the culture of poverty pathologies. Correlatively, poor persons who are less integrated into the pathological subculture may exhibit the "positive motivational effect," or the incentive effect, predicted by Conlisk and others. Assuming that there are approximately equal proportions of pathological and nonpathological in the New Jersey sample, combining both groups would account for the initial finding of no substantial experimental work effect. If such is the case, then a consideration of these pathological traits and values will add to the knowledge of the processes of labor force participation among the poor and, more importantly, will give some better indication of the utility of NIT as a national social welfare program.

#### The Variables to be Considered

The extensive interviews administered quarterly to the families in the sample contain a number of social psychological variables which may

be expected to have some effect on work behavior. For the most part, the items were drawn from other studies. Some items were designed to measure respondents' attitudes towards work and others were taken from standard personality scales, such as the McClosky and Schaar (1965) anomie scale. Often only some of the items from the original scale were used. Moreover, most scales included have been developed and validated on middle-class populations, or occasionally on representative national samples; consequently, little is known about how these measures operate in the context of the poor. When considering a population in which a number of deviant values and attitudes are thought to coalesce into a syndrome or "culture" of poverty, the designation of items to be treated as measures of particular traits is likely to be a highly arbitrary one. (See for example, Ireelan, Moles, and O'Shea, 1969.) For these reasons the available social psychological items (26 in all, listed below) were factor analyzed in order to uncover the major dimensions being measured. The items were administered to 1166 male heads of households in the interview prior to enrollment in the experiment and were repeated approximately once a year.<sup>5</sup> The data available for this analysis cover the first half of the experiment, that is, the first eighteen months.

Table 1 shows the matrix of Pearson  $r$ 's for the 26 items as measured at pre-enrollment. To facilitate visual inspection of the matrix, the items have been arranged into the factors which were eventually produced by the factor analysis. Missing data were omitted from the computations on an item-by-item basis; the correlations between items are based on the total number of cases for which data on both items were available.

[Table 1 About Here]

TABLE 1  
CORRELATION MATRIX

	1	2	3	4	5	6	7	8	9	10	11	12	13
1	1.000												
2	.407	1.000											
3	.368	.233	1.000										
4	.301	.288	.277	1.000									
5	.299	.265	.380	.335	1.000								
6	.266	.188	.246	.270	.411	1.000							
7	.032	-.013	.038	.103	.034	.061	1.000						
8	.060	.024	.082	.080	.039	.069	.618	1.000					
9	-.072	-.067	-.130	-.082	-.086	-.048	.284	.217	1.000				
10	.015	.002	-.043	.011	-.027	.003	.209	.109	.140	1.000			
11	.098	.133	.105	.142	.241	.195	.019	.024	-.008	.018	1.000		
12	.160	.187	.202	.310	.339	.351	.024	.004	-.034	-.043	.307	1.000	
13	-.007	.026	-.005	.051	.012	.030	.040	-.017	.051	.014	.208	.116	1.000
14	-.029	-.042	-.101	-.016	-.038	.026	-.006	-.108	.173	-.018	.021	-.006	.028
15	.120	.032	.123	.068	.011	.016	.085	-.006	-.009	.038	-.093	.004	-.005
16	.036	.001	.014	-.008	.034	.024	-.107	-.063	.008	-.017	-.064	-.080	-.098
17	.013	-.055	.086	-.098	-.014	.018	-.057	-.011	-.011	-.090	-.015	-.033	-.032
18	.097	.050	.141	.054	.138	.116	-.013	.002	-.035	-.035	.030	.027	.002
19	.301	.128	.315	.112	.215	.151	.082	.136	-.055	-.065	-.004	.114	-.053
20	-.003	.004	.105	-.024	-.020	.029	-.115	-.063	-.098	-.009	.004	-.009	.015
21	-.010	.002	.065	-.046	.026	.012	-.225	-.100	-.144	-.110	-.026	-.005	-.026
22	.032	-.055	.059	-.036	.005	-.055	-.075	-.060	-.033	-.089	-.058	.003	-.050
23	-.007	.020	-.003	.093	-.018	.031	.158	.125	.048	.075	.059	.022	.044
24	-.026	-.077	-.057	-.075	-.070	-.029	-.018	.004	.084	.022	-.028	-.038	.057
25	.001	.013	.052	-.063	-.027	-.062	-.182	-.127	-.109	-.140	-.043	-.031	-.058
26	.023	.075	.065	.150	.063	.115	.313	.237	.064	.116	.093	.039	.060

TABLE 1 (cont.)

	14	15	16	17	18	19	20	21	22	23	24	25	26
14	1.000												
15	.324	1.000											
16	.272	.196	1.000										
17	-.114	.017	.055	1.000									
18	-.042	.064	.087	.134	1.000								
19	-.136	.152	-.004	.094	.189	1.000							
20	-.068	-.109	-.040	.120	.068	.015	1.000						
21	-.131	-.018	.013	.114	.065	.044	.304	1.000					
22	-.002	.033	.061	.024	.007	-.016	-.013	.034	1.000				
23	-.026	.030	-.015	-.070	-.065	.028	-.052	-.083	-.301	1.000			
24	.008	-.072	.010	.088	-.045	-.060	.017	-.053	-.027	-.028	1.000		
25	-.052	.011	.072	.031	-.021	-.078	.102	.121	.072	-.144	-.006	1.000	
26	-.066	-.051	-.060	-.052	-.062	.015	-.058	-.243	-.081	.187	-.029	-.163	1.000

A principal components factoring routine extracted eight factors<sup>6</sup> which were then subjected to a varimax orthogonal rotation. The rotated factor loadings for the 26 items are shown in Table 2.

[Table 2 About Here]

Perhaps surprisingly, the eight rotated factors do provide a reasonably good representation of the data, accounting for 51.7 percent of the total variance among the items and 100 percent of the common variance (the latter by definition). The matrix of loadings suggests that the solution approaches so-called simple structure, each item loading highly on one and only one factor.<sup>7</sup> (Item (6) is the only exception to this pattern.) The following is an examination of whether the factors can be given a coherent theoretical interpretation.

Factor One: Time Orientation and Anomy

The following six items showed loadings of .40 or better on the first factor:

- 1) Nowadays, with world conditions the way they are, the wise person lives for today and lets tomorrow take care of itself.
- 2) Planning only makes a person unhappy since your plans hardly ever work out anyhow.
- 3) There is no sense taking a chance failing at something new when I'm doing all right as I am.
- 4) Everything changes so quickly these days that I often have trouble deciding what is right and what is wrong.
- 5) People were better off in the old days when everyone knew just how he was expected to act.
- 6) The trouble with the world today is that most people really don't believe in anything.<sup>8</sup>

Although Table 1 shows that the six items are modestly correlated (average  $r = .302$ )<sup>9</sup> and Table 2 shows them all to load reasonably high on

TABLE 2  
ROTATED FACTOR LOADINGS

	1	2	3	4	5	6	7	8	$\underline{h}^2$
1	.744*	.027	-.072	.074	.080	-.001	.029	.114	.585
2	.677*	-.038	.007	-.007	-.176	.054	-.077	.053	.503
3	.607*	.019	.016	-.028	.325	.010	.087	-.066	.488
4	.588*	.057	.219	.007	-.089	-.070	-.089	-.159	.443
5	.572*	-.012	.363	-.003	.179	-.030	.083	-.103	.510
6	.449*	.061	.433*	.061	.164	.032	-.031	-.026	.425
7	.034	.837*	.012	-.033	.041	-.154	-.062	-.101	.742
8	.081	.786*	-.060	-.137	.129	-.036	-.014	-.075	.670
9	-.205	.537*	.123	.220	-.080	-.058	.072	.250	.472
10	.067	.417*	-.052	.080	-.297	.124	-.175	.134	.340
11	.128	-.002	.684*	-.075	-.023	.003	-.045	-.011	.493
12	.339	-.033	.610*	-.047	.039	-.046	.073	-.125	.515
13	-.108	.031	.533*	-.013	-.040	.011	-.093	.119	.321
14	-.114	.001	.176	.776*	-.182	-.098	.026	.006	.690
15	.123	.061	-.144	.666*	.161	-.068	-.038	-.194	.553
16	.060	-.098	-.127	.627*	.083	.027	.023	.102	.441
17	-.090	-.043	-.025	-.046	.590*	.149	.035	.353	.508
18	.050	-.010	.097	.123	.589*	.100	.010	-.049	.386
19	.363	.080	-.140	-.030	.580*	-.060	-.071	-.117	.518
20	-.003	.017	.056	-.087	.031	.781*	-.045	.060	.628
21	-.014	-.168	-.015	-.043	.159	.719*	.047	-.149	.598
22	-.005	-.008	-.054	.005	.025	-.080	.773*	-.099	.618
23	.018	.095	.011	-.006	-.015	-.102	-.755*	-.103	.601
24	-.024	.002	.015	-.033	.006	-.069	.002	.849*	.728
25	.098	-.226	-.183	.007	-.166	.307	.290	.041	.302
26	.133	.374	.084	-.200	-.077	-.288	-.240	-.051	.354
% of Common Variance Explained	19.8	15.2	12.4	11.9	11.1	10.7	10.5	8.5	

one factor, textual examination of the items suggests that two different concepts are being measured: time orientation and anomie. These concepts are closely related. Both concepts, for example, convey a lack of personal efficacy and a lack of ability or willingness to direct the course of one's life. However, time orientation has been a central focus in all theories of poverty. Allen states: "It has been widely accepted by social scientists that short time perspective and anchorage in the present rather than in the future is a well-documented personality attribute of the poor" (1970:246). Miller, Riessman, and Seagull, similarly assert that the related deferred gratification pattern ". . . has been in the first rank of principles explaining 'lower class behavior.' Indeed, it is probably the most frequently used element in discussion of lower class life" (1965:286). Hence, it seemed reasonable to treat the two concepts separately, rather than slavishly adhering to the results of the factor analysis.

The first three items,<sup>10</sup> then, are taken to represent a present time orientation. It is worth noting that items (1) and (2) have been widely used and variously defined by researchers, although all convey essentially the same meaning. Strodbeck (1958), who developed the items as part of his "V-Scale" of values, feels that they represent a "mastery" dimension. Rosen (1956; 1959) uses the items to measure "present-future orientation," which "concerns a society's attitude toward time and its impact upon behavior. A present-oriented society stresses the merit of living in the present with an emphasis upon immediate gratifications; a future-oriented society urges the individual to believe that planning and present sacrifices are worthwhile or morally obligatory, in order to insure future gains" (1956:208). It is considered a value orientation which "define[s] and

implement[s] achievement motivated behavior" (1956:208). In a similar vein, Rehberg, Shafer, and Sinclair, feel that the items measure "time orientation--the degree to which the individual believes he ought to use some of the time in the present to prepare for the future" (1970:37). Irelan, Moles, and O'Shea (1969) also used these same items, but as part of their measure of fatalism. They reiterate: "the fatalistic outlook of the poor, their resignation to an uncontrolled future in the face of which they feel helpless and for which, therefore, they see no point in planning--these are repeatedly pointed out as traits of the poverty culture" (1969:408).

Although poverty theorists have maintained that a present-time orientation is found disproportionately among lower status groups in general, and those in the culture of poverty in particular, the evidence is inconclusive. A recent review of the experimental evidence on time orientation among the poor leads Allen to conclude: "In sum, the literature review indicates that the assumption that the poor have shorter time perspectives is rather untenable in light of empirical findings" (1970:246-247). He further notes that most of the relevant studies have been based only on samples of children. Time orientations have also been studied in the context of achievement values, but primarily among adolescent samples. Again, contradictory results have been reported. Rosen (1956; 1959) and Strodbeck (1958) found that time orientation, in combination with other value orientations, was related to social class; Rehberg, Shafer, and Sinclair, (1970), however, report that time orientation combined with other mobility attitudes was not.

The Irelan, Moles, and O'Shea, research was intended to test an assumption implicit in the culture of poverty thesis, that responses to several attitudes related to the hypothesis would not differ by ethnic group among the poor. Their sample consisted of approximately equal proportion of blacks, whites

and Spanish-speaking, half of whom were welfare recipients. There were no significant differences for ethnicity with respect to the fatalism measure among those receiving assistance, but there were some differences among the nonrecipients. The authors conclude, "the relationships of fatalism and ethnicity is not a consistent one" (1969:409). The responses to these items did indicate a greater feeling of fatalism among the Spanish-speaking. The black and white welfare recipients were also more fatalistic than their nonwelfare counterparts.

The literature on time orientation and social mobility suggests that it is possible to infer the effect of this variable on labor force participation, independently of the culture of poverty thesis. For instance, Rehberg, Shafer, and Sinclair, use time orientation as one among a set of mobility attitudes, that is, "those predispositions toward aspects of the social and physical environment which either increase or decrease an individual's probability of maintaining or attaining a social position of high prestige" (1970:37). If a future time orientation among white adolescents facilitates mobility in the occupational structure, then it seems reasonable to expect future time orientation to affect the labor force response of the poor in much the same manner. In either case, the ability to defer gratification and plan for the future--capacities necessary for labor force "success"--may be facilitated by a strong future time orientation. The expectation is that a work disincentive effect will appear for those among the poor who have a strong present time orientation.

#### Anomy

Items (4), (5), (6), and the other half of factor one, are all from the McClosky and Schaar (1965) anomy scale.<sup>11</sup> These authors conceptualize the variables as

. . . the feeling that the world and oneself are adrift, wandering, lacking in clear rules and stable moorings. The anomic feels literally de-moralized; for him, the norms governing behavior are weak, ambiguous, and remote. He lives in a normative "low pressure" area, a turbulent region of weak and fitfull currents of moral meaning. The core of the concept is the feeling of moral emptiness (1965:19).

In short, anomie is defined as "the tendency to perceive the society as normless, morally chaotic, and adrift" (1965:38-39).

Although the work on anomie and alienation has been extensive, various definitions and measures of the concepts have been employed. For instance, it has been suggested (Middleton, 1963) that the widely used Srole anomia scale (1956), intended to measure normlessness, seems to actually measure cynicism, pessimism, and despair. Such is not the manifest meaning of the McClosky items used here. Rather, these items seem more consistent with the "meaninglessness" dimension of Seeman's scheme of alienation, defined as the situation in which "the individual is unclear as to what he ought to believe--when the individual's minimal standards for clarity and decision-making are not met" (1959:785).

The vast majority of research in the area of anomie and alienation has reported that these traits are highest among the low status groups, especially the poor. In his recent review of the literature on personality correlates of poverty, Allen states:

. . . greater anomic responses . . . repeatedly have been found to be associated with lower class status . . . Those who score high on the anomie scale are those who are unsuccessful and unprosperous--persons who are, in McClosky and Schaar's (1965) terms, "isolated, deprived, and ignorant." McClosky and Schaar (1965) assert that such feelings are due primarily to cognitive, emotional, and attitudinal factors that have impaired learning and socialization. They therefore argue strongly for the basis of anomie in personality factors such as hostility, anxiety, etc., existing independently of social class level (1970:252).

The McClosky scale has been found to correlate significantly and negatively with occupation and education (McClosky and Schaar, 1965). The normlessness component of Dean's (1961) alienation scale also correlates negatively with occupation, income, and education. Finally, Middleton (1963) found considerably larger proportions of blacks than whites expressing feelings of normlessness and meaninglessness.

The theoretical relationship between anomy and labor force participation is not obvious. On the one hand, it may be that anomy is part of a syndrome of withdrawal and lack of integration into the society, and therefore correlated with other forms of withdrawal and nonparticipation, including withdrawal from the labor force. This implies a disincentive effect due to NIT on the highly anomic. On the other hand, anomy with respect to the current society may simply reflect integration into a different set of values. Note that the three items being used as a measure of anomy do imply a traditional orientation or a preference for the "old ways." Insofar as these values include components of the traditional work ethic, it may be that NIT will have a strong incentive effect among the highly anomic. Or both effects may occur simultaneously. With respect to the culture of poverty thesis, however, the prediction is clear: anomy is but one among a number of traits which are presumed to rule out any incentive effect.

#### Factor Two: Occupational Flexibility

Items (7) through (10) loaded highest on factor two.<sup>12</sup> They are:

7) Let's imagine that you heard about a job you could get in another city. The pay was good and it offered job security with little chance of being laid off. Would you seriously consider leaving (city in which respondent lives) and moving to the other city to take the job?

8) How would your wife feel about moving out of (city in which respondent lives) to take another job?

9) Let's imagine that you heard about a job in (city in which respondent lives) that paid quite a bit more than you are now getting. To get it you would have to enroll in a training program that lasts for six months and pays a lower salary than you are presently getting. Would you take such a job?

10) Let's imagine that you heard about another job that was part-time and would still let you hold your present job. Would you be interested in "moonlighting" and take this second job?<sup>13</sup>

These items are taken to be an indication of the willingness of the respondent to avail himself of new occupational opportunities, that is, to further participate in the labor force as a means of improving his work situation. In the short run, each option implies some hardship--for example, forced residential mobility--so in part this factor may be taken as a measure of the ability to defer gratification, that is, to suffer temporary inconveniences in order to maximize long term gains. The factor is here called "occupational flexibility." The hypothesis with respect to work response is that those who score high on occupational flexibility should be expected to maintain or increase their participation in the labor force, NIT notwithstanding.

McCarthy (1971) constructed an index which he called economic flexibility, which contained items (7), (9), and (10), together with item (22) (discussed below in factor seven), and was used as a measure of "the individual's commitment to work and the strength of his demand for work over leisure" (1971:41). Using a number of quarters worked during the first year of the NIT experiment as the measure of labor force participation, McCarthy found that economic flexibility interacted with experimental status. While no significant differences appeared for the control sample, among the experimental group, almost one-fifth of those with an economic flexibility score of zero did not work any of the quarters for which data were available. Surprisingly, however, those who scored at the middle of the scale were most likely to work the most quarters. McCarthy suggests that:

. . . the individuals with one or two scores are most likely to be working and working at reasonably good wages, and consequently less likely to change their jobs or work more. On the other hand, individuals with a zero score are more likely to have constraints on their labor force participation, e.g., health disabilities, which severely restricted what they could do even if they desired more work. The experimental guarantee simply assures them some security without the costs of attempting to increase work effort (1971:71).

When the economic flexibility variable was introduced into regression models predicting number of quarters worked and hours worked, no significant effects were found. McCarthy concludes, "Although finer measures of these values [fate control and economic flexibility] might produce different results, the results presented here seem to indicate that these variables are basically irrelevant to the individual's labor force participation decision" (1971:128).

The Ireelan, Moles, and O'Shea, (1969) study offers some evidence on a set of items similar to the occupational flexibility items. The authors state:

. . . five items tested the men's willingness to take jobs which would make certain demands upon them. If poverty induces attitudes similarly at variance with an achievement-oriented society's evaluation of work, it should also produce similar responses when people are asked to choose between work and certain other values (1969:410).

Responses were significantly different among whites, blacks, and Spanish-speaking for the assistance recipients, but not significantly different for the nonrecipients. Black recipients were most flexible and Spanish-speaking least flexible. The authors summarize their general findings on job flexibility as follows:

First is the high level of preference for taking and keeping jobs when such alternate values as friendship, easy work, familiar routines, and level of responsibility are considered. Second is the even higher degree of preference among public assistance recipients. Far from being content with living on welfare money and being unwilling to apply themselves, as they are often pictured, a large minority of men receiving AFDC-UP gave support to every question but one. The single exception asked about willingness "to move around the country a lot," a condition very disruptive to established social and family relationships (1969:411).

Factor Three: Traditionalism

The following items had high loadings on the third factor:

- 11) What is lacking in the world today is the old kind of friendship that lasted for a lifetime.
- 12) I often feel that many of the things our parents stood for are just going to ruin before our very eyes.
- 13) When teenagers get married, their main loyalty no longer belongs to their fathers and mothers.<sup>14</sup>

The first two of these three items are from the McClosky and Schaar (1965) anomy scale; the third is from Strodbeck's (1958) "V-Scale" and was intended to measure "independence from family." Collectively, the items appear to measure a feeling of the loss of traditional values, a feeling which is related to anomy. As mentioned previously, the anomy items also have elements of loss of traditional values. These three items are to be considered a more "pure" measure of this aspect of the personality syndrome of the poor. For convenience, these items will be called a measure of "traditionalism."

Like anomy, the relationship between traditionalism and labor force participation is not obvious. Persons who believe that they live in a society in which moral standards are rapidly degenerating will presumably have less incentive to "succeed" in such a world. On the other hand, such persons may wish to halt the decay of values and hence show a positive response to NIT, perhaps as a way of setting a better example for their children. It may simply be that persons high in traditionalism will also be strongly committed to other aspects of the traditional values, including a strong commitment to work. Or, as before, all these effects may be occurring simultaneously: some may respond to their high

traditionalism by decreasing labor force participation; others may respond by increasing it, thereby confounding the interpretation of the empirical results.

Factor Four: Reservation Wage

The following items showed the highest loadings on the fourth factor:

14) What is the minimum the training salary would have to be before you would decide to take the job? [c.f., item (9) above].

15) How much would the job have to pay before you would consider moving to take the job? [c.f., item (7) above].

16) What is the smallest amount of money that your family would need each year to live comfortably?<sup>15</sup>

These items are related to what economists call "reservation wage," or "asking wage"; the concept involves how far an individual will "hold out" before taking a new job. Obviously, the concept bears a relationship to occupational flexibility; presumably, persons with high reservation wages will also be the least occupationally flexible.

Once again, opposite predictions can be made regarding the influence of reservation wage on work behavior. First, since the variable resembles occupational flexibility, the earlier remarks concerning that variable also apply here. Persons who demand much of new employment opportunities are less likely than others to find new jobs which satisfy these demands; hence, it is possible to predict a disincentive effect among those individuals with high reservation wages, or, failing that, at least that such persons will not increase their work effort as a result of NIT. On the other hand, persons who require a high level of income may be those most motivated to continue or increase their work effort (see Conlisk, 1968), especially since the NIT guarantee levels are relatively low. Put differently, it may simply be that those with high reservation wages are also those with the highest achievement

aspirations, and hence presumably those most likely to increase their labor force participation as a result of NIT.

#### Factor Five

The following items showed the highest loadings on factor five:

17) Finally, taking all things together, how happy would you say you are these days: would you say you are very happy, fairly happy, or not too happy?

18) People can control their own future and can determine how their lives will turn out.

19) When the time comes for a boy to get a job, he should stay near his parents, even if it means giving up a good job opportunity.

Although the loadings of each of these items on the fifth factor are reasonably high, and although the fifth factor "explains" a little more than 11 percent of the total common variance among the items, the average correlation among these items is quite low (.139). Thus, taken collectively, the items do not lend themselves to meaningful interpretation. It would appear that item (18) "fits" with the time orientation concept, but the correlation of this item with the time orientation factor is negligible (.050). Similarly, item (19) would appear to be part of the traditionalism concept, but their correlation is also negligible (= -.140).<sup>16</sup> Factor five is hence dropped from the remainder of the analysis.

#### Factor Six: Job Satisfaction

Items loading highest on the sixth factor were:

20) How would you compare your present (last) job to all the other jobs you have had?

21) Thinking about your job, how satisfied are you with it in general?

It is obvious that these items measure job satisfaction.<sup>17</sup>

The literature on job satisfaction is extensive (see, for example, Wilensky, 1964); numerous studies have indicated that job satisfaction is lowest among the low status groups and the poor (e.g., Blauner, 1960; Blum and Rossi, 1968; Gurin, Veroff, and Feld, 1960; Hall, 1969; Inkeles, 1960; Morse and Weiss, 1955; Robinson, Rusk, and Head, 1966; Robinson, 1969; Wilensky, 1964).<sup>18</sup>

The relationship between job satisfaction and labor force participation, however, has not been systematically investigated. As Athanasiou (1969:96) concludes, "A general concept of satisfaction as . . . a motivator has not been adequately developed". Contradictory hypotheses may be entertained. On the one hand, most studies have shown that persons who are satisfied with their jobs tend to work more, although there is contradictory evidence (see Athanasiou, 1969); Katzell concludes his review of the relevant literature with the proposition that "the extent to which a person participates in a job organization varies directly with the amount of satisfaction evoked by such participation" (1964:255). One prediction, then, is that NIT will have a positive effect among the highly satisfied. On the other hand, satisfaction with one's present job may also imply an unwillingness to change jobs or otherwise take advantage of new economic opportunities; persons who are satisfied with their present job may hesitate to change it, especially if their incomes are being supplemented by NIT. A second prediction, then, is one of no difference. Finally, it seems most reasonable to assume that persons who are least satisfied with their present jobs will also have the least attachment to them; presumably, these persons would also be the most willing to take advantage of the flexibility introduced by the experimental program to seek employment which is more satisfactory. Indeed, it seems possible that the incentive effect of NIT will be most pronounced among those without strong attachments to their current jobs. Or, again, all of these forces may operate simultaneously, again confounding the interpretation of the results.

Factor Seven: Work Motivation

High loadings on factor seven appeared for the following items:

22) If someone gave you that much money [c.f., item (16)] each year with no strings attached, what would you do: would you quit work, work less than you do now, continue to work about the same as you do now, work more, or what?

23) Why do you say that? [Follows item (22).]

Item (22) has been used as a measure of work motivation since the early Morse and Weiss study (1955). Item (23) is contingent upon item (22) and for the factor analysis item (23) was coded into those who gave financial reasons versus those who gave other reasons. Unsatisfactory coding of the original data prevented any more meaningful use of this variable. (For instance, it was not possible to code responses into the widely used "intrinsic" vs. "extrinsic" dimensions, see Featherman, 1971.) In its present form, then, item (23) is more or less useless for the purposes of this analysis; hence, it is dropped from the remainder of the analysis, and "work motivation" is measured by responses to item (22).<sup>19</sup>

The relationship of work motivation to labor force response--that the highly motivated will work the most--has been disputed by some of the current research in the area. Featherman (1971; 1972), for example, was unable to discover any effect of work motivation (or "achievement orientations") on status attainment although his analysis was based on data from the Princeton Fertility Study. Despite his negative results, however, it seems plausible to hypothesize that those who are most motivated to work are most likely to exhibit a positive incentive effect as the result of NIT. For example, Conlisk (1968), as noted earlier, has suggested that the positive motivation effect of NIT may in the long run outweigh the disincentive effect predicted by the simple static model. Indeed, much of the rationale behind NIT as a work incentive program is built upon the finding that motivation to work is widespread,

even among the poor (c.f. Hall, 1969; Morse and Weiss, 1955; Tausky, 1968; Weiss and Kahn, 1959). NIT, by removing the external restraints on labor force mobility, is conceived as providing the opportunity for the already-present work motivation to be translated into better jobs or an overall increase in labor force participation.

Factor Eight: Ideal Job Aspirations

The last factor contained only one item with a high loading:

24) What type of work would you try to get into if you could start all over again?<sup>20</sup>

For present purposes, item (24) is taken as a measure of ideal job aspirations. Job aspiration is a common theme among writers on the poor; for instance, low levels of aspirations and lack of mobility values are often seen as central traits of the culture of poverty.

Proper employment of this variable requires that it be used in conjunction with current occupation (see Inkeles, 1960; Wilensky, 1964), but this latter is not available for the present analysis. No matter what a respondent's current occupation, those scoring high on this measure are assumed to have high aspirations (even though it is possible that any given "aspiration" may be lower than the respondent's actual occupational attainment).

Once again, the effects of high aspirations on work behavior are unclear. According to the culture of poverty theorists, low aspirations are part of the syndrome of "pathologies" which allegedly rule out any incentive effect due to NIT. Correlatively, those with high aspirations are assumed to be those most interested in increasing their work effort. On the other hand, unrealistically high aspirations may have the same disincentive effect, that is, may act as a barrier to labor force participation. For instance, blacks who have dropped out of school in the eighth grade who "aspire" to

being doctors or lawyers may use these aspirations as an excuse not to participate in the more demeaning jobs which will be open to them.

Even more probably, aspirations (as measured by item (24)) may be unrelated to work behavior, since the hopes and dreams of the fantasy world conjured up by the phrase, "if you could start all over again," may exert little influence on current and actual labor force decisions.

### Results

The basic regression model of labor-supply response of families to the NIT experiment used by Watts (1971) contains the following independent variables: the pre-enrollment value of the dependent labor force variable, city, ethnicity, number of adults and number of children in the family, age of the head, and experimental status. The dependent variables are: number of adults employed in the family, total hours worked by the family, and total earnings for all family members. Since the key social psychological variables employed here are only available for the male head of household, the model has been adjusted and two basic dependent variables are used (also used by Watts in different analyses [1971]): the number of hours worked by the male head during the week prior to the administration of quarterly interviews, taken as an average of the hours reported at the fifth and sixth quarterly, and similarly, the average earnings reported for the weeks prior to the fifth and sixth quarterly interviews.<sup>21</sup> Two additional independent variables which were found to consistently affect labor response were drawn from the models employed by McCarthy (1971): number of weeks worked during 1968, prior to the start of the experiment, and an index of the health of the respondent. Welfare status was also used as an independent variable in order to remove its confounding effect.<sup>22</sup> Finally, for each of the eight attitudinal factors, scales were computed and introduced separately into the model, net of all the other independent variables.<sup>23</sup> The scales were

introduced as main effects and also in interaction with experimental status, since the primary concern is whether these variables have an effect on the labor response of the experimental group.

Tables 3 and 4 indicate that, in general, the attitudinal variables do not have a significant effect on work response, either as main effects

[Tables 3 and 4 About Here]

or in interaction with experimental status. For average hours worked the only significant variables are anomy and traditionalism. Anomy has a negative effect on average hours worked: those who scored high on anomy worked, on the average, four hours less than those who scored low on anomy. However, the effect is reversed when anomy is introduced in interaction with experimental status: those in the experimental group who are highly anomic show an incentive effect of over five more hours worked. Traditionalism has a positive effect of almost four hours. No other significant effects are found.<sup>24</sup> The negative main effect of anomy in the hours model is consistent with the expectations that the highly anomic would exhibit withdrawal and lack of integration into the society and hence reduced participation in the labor force. Likewise, the positive main effect of traditionalism supports the hypothesis that traditionalists are committed to the work ethic and would exhibit greater participation. The reversal and hence positive effect of anomy as an interaction term does not suggest an obvious interpretation. Recall, however, that the anomy items are intended to measure a feeling of normlessness, of a lack of clear rules governing behavior. It may be that the experimental treatment itself offers anomic persons some set of norms governing their work behavior, a set of rules which afford a sense of predictability and consistency, at least with respect to their work, and hence results in a work incentive.

TABLE 3  
BASIC REGRESSION PREDICTING AVERAGE HOURS

Independent Variable	Regression Coefficient	Standard Error of Reg. Coeff.	Standardized Regression Coeff.	Significance Level
Constant	18.7083	4.360	--	--
Hours at pre-enrollment	.1944	.032	.198	.000
Weeks worked in 1968	.2627	.041	.209	.000
Welfare status	-2.9167	1.444	-.064	.044
Trenton	-1.9489	1.795	-.035	.278
Paterson-Passaic	-1.0478	1.306	-.029	.423
Scranton	-3.3092	1.864	-.094	.076
Black	-2.7724	1.726	-.081	.109
Spanish-speaking	-3.7816	1.796	-.103	.036
No. of adults in family	-.4288	.675	-.020	.526
No. of children in family	.4073	.254	.052	.109
Young	-1.6449	1.066	-.051	.123
Health	-4.2662	1.395	-.095	.002
Experimental status	-1.0111	3.954	-.031	.798
Time orientation	-.0895	1.725	-.003	.959
Anomy	-4.2046	1.689	-.129	.013
Occupational flexibility	1.8209	1.586	.056	.251
Traditionalism	3.8753	1.852	.104	.037
Reservation wage	-.6130	1.620	-.018	.705
Job satisfaction	-.5565	1.559	-.017	.721
Work motivation	-1.5182	1.703	-.042	.373
Ideal job aspirations	.7744	1.692	.022	.647
Time orientation - exp.	-1.8118	2.163	-.054	.402
Anomy - experiment	5.3436	2.142	.147	.013
Occupational flex. - exp.	-3.0621	2.000	-.086	.126
Traditionalism - exp.	-3.3120	2.362	-.102	.160
Reservation wage - exp.	.2112	2.0320	.006	.917
Job satisfaction - exp.	2.4356	1.988	.068	.221
Work motivation - exp.	2.1173	2.182	.079	.332
Ideal job aspirations - exp.	-.7466	2.148	-.023	.728

Mean of Y = 31.847; corrected  $R^2$  = .1589; F ratio = 7.36; degrees of freedom = 29,947; significant > .0000; N = 977.

TABLE 4  
BASIC REGRESSION PREDICTING AVERAGE EARNINGS

Independent Variable	Regression Coefficient	Standard Error of Reg. Coeff.	Standardized Regression Coeff.	Significance Level
Constant	60.9087	13.728	--	--
Earnings at pre-enrollment	.2377	.039	.197	.000
Weeks worked in 1968	.7265	.125	.179	.000
Welfare status	-13.9189	4.582	-.094	.002
Trenton	-18.3145	5.629	-.102	.001
Paterson-Passaic	-3.2748	4.073	-.028	.422
Scranton	-20.6837	5.854	-.181	.000
Black	-9.9978	5.438	-.091	.066
Spanish-speaking	-19.3560	5.656	-.164	.001
No. of adults in family	-3.5504	2.118	-.052	.094
No. of children in family	2.1399	.801	.085	.008
Young	-3.6401	3.341	-.035	.276
Health	-17.5059	4.390	-.121	.000
Experimental status	4.8132	12.405	.045	.698
Time orientation	-4.0730	5.411	-.038	.452
Anomy	-6.4611	5.294	-.062	.223
Occupational flexibility	3.2686	4.972	.031	.511
Traditionalism	6.2495	5.800	.052	.282
Reservation wage	1.9967	5.094	.019	.695
Job satisfaction	2.5203	4.869	.024	.605
Work motivation	-6.9468	5.355	-.060	.195
Ideal job aspirations	5.5252	5.300	.049	.298
Time orientation - exp.	-3.5672	6.779	-.033	.599
Anomy - experiment	7.6267	6.713	.065	.256
Occupational flex.- exp.	-5.4596	6.269	-.048	.384
Traditionalism - exp.	-8.4946	7.400	-.081	.251
Reservation wage - exp.	5.9604	6.365	.055	.349
Job satisfaction - exp.	5.8228	6.220	.050	.349
Work motivation - exp.	5.4299	6.843	.063	.428
Ideal job aspirations - exp.	-8.6522	6.731	-.082	.199

Mean of Y = 89.928; corrected  $R^2 = .2074$ ; F ratio = 9.81; degrees of freedom = 29,947; significant > .0000; N = 977.

For average earnings as the dependent variable none of the social psychological variables have a significant main or interaction effect. It is worth pointing out that there is no significant effect for experimental status in either of the equations, a finding consistent with earlier data from the experiment (McCarthy, 1971; Watts, 1971).

It was anticipated on the basis of the culture of poverty theory that the poor who are most integrated into the culture of poverty, that is, those who can be characterized as most "pathological," would exhibit a disincentive effect. Tables 5 and 6 show the basic models again predicting average hours and earnings, but this time with six of the social psychological variables

[Tables 5 and 6 About Here]

combined into one measure (scale sum): those who scored high on present time orientation, anomie, and traditionalism, and low on occupational flexibility, ideal job aspirations, and work motivation can be considered as the most "pathological"--that is, those who do not espouse the dominant values necessary for achievement and exhibit restricting personality traits. Persons with four or more of these characteristics were given a score of one on this dummy variable, all others were given a score of zero.<sup>25</sup> Scale sum was then introduced into the basic model, with the expectation of finding a significant disincentive effect among those in the experimental group who are high on this syndrome. Tables 5 and 6 show the results for the equations predicting average hours and earnings. For the hours equation the composite index is significant as a main effect, and those high on the negative traits do show a reduced work effort of over three hours. However, scale sum in interaction with experimental status is not significant but shows a slight effect in the opposite direction: that is,

TABLE 5

## BASIC REGRESSION PREDICTING AVERAGE HOURS WITH SCALE SUM

Independent Variable	Regression Coefficient	Standard Error of Reg. Coeff.	Standardized Regression Coeff.	Significance Level
Constant	19.9280	3.148	--	--
Hours at pre-enrollment	.1966	.032	.200	.000
Weeks worked in 1968	.2658	.040	.212	.000
Welfare status	-2.6198	1.426	-.057	.067
Trenton	-2.2499	1.783	-.041	.207
Paterson-Passaic	-1.0089	1.281	-.028	.431
Scranton	-3.3740	1.836	-.096	.066
Black	-2.8559	1.705	-.084	.094
Spanish-speaking	-4.2077	1.775	-.115	.018
No. of adults in family	-.4758	.671	-.023	.479
No. of children in family	.3984	.247	.051	.107
Young	-1.9254	1.052	-.059	.068
Health	-4.3221	1.389	-.097	.002
Experimental status	-1.3534	1.166	-.041	.246
Scale sum	-3.3158	1.714	-.091	.053
Scale sum - experiment	2.5762	2.201	.059	.242

Mean of Y = 31.847; corrected  $R^2 = .1587$ ; F ratio = 13.27; degrees of freedom = 15,961; significant  $> .000$ ; N = 977.

TABLE 6

## BASIC REGRESSION PREDICTING AVERAGE EARNINGS WITH SCALE SUM

Independent Variable	Regression Coefficient	Standard Error of Reg. Coeff.	Standardized Regression Coeff.	Significance Level
Constant	60.6178	9.919	--	--
Earnings at pre-enrollment	.2640	.038	.219	.000
Weeks worked in 1968	.7241	.124	.178	.000
Welfare status	-13.3733	4.537	-.090	.003
Trenton	-18.2714	5.602	-.102	.001
Paterson-Passaic	-3.2830	4.006	-.028	.413
Scranton	-20.6322	5.774	-.181	.000
Black	-10.7926	5.384	-.098	.045
Spanish-speaking	-20.7727	5.600	-.176	.000
No. of adults in family	-3.4485	2.109	-.051	.102
No. of children in family	2.4006	.785	.095	.002
Young	-4.1957	3.303	-.040	.204
Health	-17.9233	4.386	-.124	.000
Experimental status	1.7260	3.656	.016	.637
Scale sum	-8.2519	5.377	-.070	.125
Scale sum - experiment	5.9427	6.901	.042	.389

Mean of Y = 89.928; corrected  $R^2 = .2044$ ; F ratio = 17.71; degrees of freedom = 15,961; significant > .0000; N = 977.

there is a positive effect of 2.6 more hours worked for those who are most "pathological" and in the experimental group. In the earnings equation scale sum has no significant effect, although as main effect it approaches significance at the .10 level, and the direction is negative. However, in interaction with the experimental dummy, the sign of the coefficient is again reversed, although it is not significantly different from zero, a pattern consistent with the effects on hours.

#### A Note on a Deviant Case Analysis

Those working with the available data from the ongoing NIT study are finding no significant disincentive effects on the work behavior of males in the sample. Since aggregating the sample may obscure possible effects, by, say, cancelling out negative and positive effects a "deviant case" analysis was performed, again following the leads of Watts's earlier reports (1970; 1971). The purpose was to see whether or not those individuals who changed their labor force participation the most, particularly those decreasing their participation, also exhibited any of the culture of poverty characteristics. Thus, perhaps the "deviants" are those with negative traits. Cross-tabular analyses were done in an attempt to find out whether the attitudinal variables were related to major labor force participation changes. The sample was divided into three groups: those whose earnings increased or decreased by more than \$25 between the pre-enrollment and the 5th and 6th quarterly average, and those whose earnings stayed the same. Similarly for hours worked, the sample was divided into three groups with 10 hours as the cutting point for the distribution. These labor response changes were run against the eight social psychological scales, with experimental status as a test variable. Not a single one of the tables showed an association (gamma) of above .10. The results are not

surprising in the light of the similarly negative findings produced in the regression analyses.

### Discussion

The results of the preceding analysis can be conveniently summarized: the social psychological variables herein considered have no noticeable or important effect on work behavior. The exceptions are threefold: first, anomie had a moderate depressing effect on labor force participation as measured by average hours worked but not on average earnings, and traditionalism had a moderate positive effect; second, the anomie effect was reversed in interaction with experimental status; and third, the composite index of six attitudinal variables also had a negative main effect on average hours. For the rest, there were no significant main or interaction effects: work motivation, occupational flexibility, time orientation, and the others bear no significant relation in these data to measured work behavior.

Several reasons may be offered. First, it is possible that the measures of these social psychological characteristics are sufficiently unreliable that they cannot be significantly correlated with anything. There are, however, good reasons to reject this explanation. First of all, the reliability of the measures is quite high, given the population being studied and the rather low standards of adequate measurement currently employed by sociologists. As mentioned earlier, these measures (as measured by average  $r$ ) are seldom less reliable than the Srole anomie scale, one of the most widely used scales in sociological research. Second, the factor analysis

of the attitude items did indicate that they shared about fifty percent of the total variance among them, more than enough covariation to produce "significant" results if the independent and dependent variables were in fact empirically correlated in the real population.

A second possible reason for the "no difference" findings is that most of the variables can be hypothetically related to the dependent variable in contradictory ways; for six of the eight variables positive and negative effects on the dependent variables were hypothesized. This merely reiterates what social psychologists have become increasingly aware of, namely, that attitudes are often related to actual behaviors in odd and unpredictable ways. Put another way, any given attitude (be it "work motivation" or "anomy") will frequently "be consistent with" a wide variety of actual behaviors, which means that the attitude in question will seldom offer a good prediction of any particular one of the behaviors with which it is "consistent," and, indeed, such is the case here. Or, in other words, the relationship between an attitude or psychological trait and the behavior which it allegedly subtends will usually be determined by the social and historical context in which that attitude occurs, and in the absence of any significant knowledge about these all-important contexts, it is unlikely that the "relationship" will lend itself to ready theoretical interpretation, which is again the situation of this research.

A final possibility for the present findings, indeed related to the second, is that the underlying theoretical perspective of this research, namely the culture of poverty thesis, is simply inaccurate. The thesis is one of a class of sociological theories which rest upon the now-tenuous assumption that attitudes determine behavior; most recent research has indicated that the relationship between attitudes and behavior is not

direct, frequently nonexistent, and always much less obvious than simple attitudinal models of behavior predict. It seems probable that this is also the case here. It is fairly well-established by now that the labor force participation of the poor is determined primarily by factors over which the poor have no control: racial, class, and occupational discrimination, poor training, poor health, restrictive and regressive welfare programs which penalize recipients for work, inadequate transportation to and from potential work places, and so on. Against this rather awesome array of external inhibitions, the particular attitudinal and social psychological traits of the poor--whatever they may be--seem largely immaterial, as indeed they have been shown to be in this research. Even when one takes only the hardcore "pathological"--those scoring most negatively on nearly all of the traits herein discussed--there is no evidence of a disincentive effect due to NIT. It can be concluded that despite the pessimistic predictions made by culture of poverty theorists, there is no indication that the real or alleged social psychological traits and attitudes of the poor determine in any significant way their work behavior, at least not for this time and this sample. Whatever its other merits, there is no indication that the efficacy of NIT as a national social welfare program would be encumbered by the attitudinal and psychological characteristics of the poor.

NOTES

<sup>1</sup>Given the prevalent image of the poor as lazy and shiftless, it is important to emphasize that the working poor are by no means a small minority of the total poverty population. In 1968, 48 percent of all families below the official poverty line were headed by an employed person. Fifty-seven percent of male headed and even 44 percent of female headed poor families had an employed head (Wolfbein, 1971).

<sup>2</sup>Note that the "simple" work-leisure choice model contains implicit motivational elements, namely, a preference for leisure over work. However, there is some evidence from national surveys that do not support that assumption. Morse and Weiss (1955) found that when presented with the hypothetical situation in which persons could choose not to work if an adequate level of income were provided, 80 percent of the respondents said they would work anyway. More recently Tausky (1968) asked a similar question to a national sample of blue-collar males and also found that 82 percent said they would work anyway.

<sup>3</sup>Lewis states:

I believe that although there is still a great deal of poverty in the United States . . . , there is relatively little of what I would call the culture of poverty. My rough guess would be that only about 20 percent of the population below the poverty line . . . have characteristics which would justify classifying their way of life as that of a culture of poverty (1966b:11).

<sup>4</sup>This suggests that the sense of security provided during a short-term experiment may be too artificial to produce "real" results.

<sup>5</sup>It was anticipated that one result of the NIT experiment would be changes in these social psychological characteristics and orientations themselves. Consequently, the experiment is designed to make repeated measures of these variables. At the present time, data are available for pre-enrollment and again roughly one year after the beginning of the experiment. Several exploratory analyses have been performed on these trend data and reveal no consistent differences between experimental and control groups. The following table shows the associations (gamma) between the pre-enrollment and "after one year" values for each of the eight scales examined in this research, shown separately for experimental and control groups:

Scale	Control	Experimental	Total
1. Time orientation	.21	.22	.22
2. Anomy	.23	.24	.24
3. Occupational flexibility	.25	.26	.26
4. Traditionalism	.10	.12	.12
5. Reservation wage *	.06	.24	.15
6. Job satisfaction	.06	.21	.14
7. Work motivation	.14	.24	.18
8. Ideal job aspirations	.11	.17	.15

\*Corrected for inflation.

For three of the eight scales differences appear between the two groups, but in the direction opposite to that expected, since the control group shows greater change. More detailed analyses of these relationships are being undertaken. Hence, although later analyses on the results for the entire three years of the program may indeed show real change, the data currently available suggest that these orientations be taken as underlying personality or attitudinal characteristics which remain relatively stable during the first year.

<sup>6</sup>The computational routine was instructed to stop factoring when the eigenvalue reached one. Thus, by definition, the amount of variation reproduced by the eight factors equals the total common variance.

<sup>7</sup>A factor loading greater than .40 was taken as high.

<sup>8</sup>Items (1) and (2) are from Strodbeck's (1958) "V-Scale," from the factor called "Mastery." Items (4), (5) and (6) are from the McClosky and Schaar (1965) anomaly scale. The response categories are the usual 4 Likert-type, ranging from strongly agree to strongly disagree; "not sure, depends, don't know, no opinion" responses were omitted.

<sup>9</sup>Robinson, Rusk, and Head, state that "Of all the indices [of reliability] that have been proposed, . . . probably none combines simplicity with amount of information contained as well as the inter-item correlation matrix" (1968:16). The average inter-item correlation will be used as a more summary measure. It is worth noting that one of the most widely used scales in sociological research, the Srole anomaly scale (Bonjean, C., McLemore, D., and Hill, R., 1967) has an average inter-item correlation (Srole, 1956 sample) of .303.

<sup>10</sup>Their average inter-item correlation equals .336.

<sup>11</sup>Their average inter-item correlation is .338. Although the complete anomaly scale consists of nine items, only five [(4), (5), (6), (11), (12)] were used in this study. Note that all five did not cluster in the factor analysis; instead, (11) and (12) were part of factor three. From Table 1 one can see that item (11) is not well correlated with (4), (5), and (6), although item (12) is.

<sup>12</sup>Their average inter-item  $r = .263$ .

<sup>13</sup>The response categories for item (7), (9) and (10) were simply yes and no; for item (8), not mind, mind slightly, object strongly. The don't knows were dropped from the computation of correlations.

<sup>14</sup>Average inter-item  $r = .210$ . Item (13) was scored in the reverse direction. Response categories range from strongly agree to strongly disagree. Note that item (6) also has a high loading (.433) on this factor. However, its loading was slightly higher on factor one (.449) and it seemed to "fit" better with the other anomaly items that form that cluster.

- 15 Average  $r = .264$ . Responses were coded as follows:  
 Item (14): 1. less than \$70/week; 2. \$70-\$79; 3. \$80-\$89;  
 4. \$90-\$99; 5. \$100; 6. more than \$100.  
 Item (15): 1. less than \$100/week; 2. \$100; 3. \$101-\$120;  
 4. \$121-\$140; 5. \$141-\$150; 5. more than \$150.  
 Item (16): 1. less than \$5,000/year; 2. \$5,000-\$5,999;  
 3. \$6,000-\$6,999; 4. \$7,000-\$7,999; 5. \$8,000-\$9,999;  
 6. \$10,000 or more.

16 Note that items (13) and (19) ( $r = -.053$ ) are part of the "Independence of Family" factor of Strodbeck's (1958) "V-Scale."

17 Their correlation is .304. The response categories to item (20) were: 1. Not as good; 2. About the same; 3. Best. For item (21): 1. Very dissatisfied; 2. Little dissatisfied; 3. Fairly satisfied; 4. Very satisfied.

18 See Blauner (1960:354ff) and Wilensky (1964:135ff) on the methodological problems of studying workers' job satisfaction.

19 Responses were collapsed into three categories on the basis of the marginal distribution: 1. quit work, work less; 2. work about the same;

20 The responses were coded into the usual ten Edwards's categories.

21 If one of the two interviews was missing, the hours and earnings reported in the other interview were used. This decision rule enabled the inclusion of approximately 30 more cases. If both interviews were missing ( $N=189$ ) the observation was dropped. Hence total  $N$  for the regressions equals 977 from the original 1166 male heads for whom the attitudinal data were available from the pre-enrollment interview. The same regressions were run on the "continuous husband-wife" sample (see Watts, 1971) and the results were essentially the same as those reported below.

22 The independent variables used in the equations were defined as follows: 1) hours and earnings reported for the week prior to the administration of the pre-enrollment interview; 2) number of weeks worked in 1968; 3) a dummy for welfare status scored 1 if the respondent reported receiving welfare assistance at pre-enrollment, 0 otherwise; 4) three dummy variables for the respondent's city of residence, i.e., Trenton, Paterson-Passaic, Scranton; 5) two dummy variables for black and Spanish-speaking respondents; 6) number of adults in the family (16 years or over); 7) number of children in the family (under 16); 8) a dummy variable for young respondents, coded 1 if the head is under 35, 0 otherwise; 9) a health index scored 1 if the respondent has a health problem which limits his work, 0 otherwise; 10) and a dummy variable for experimental status, coded 1 if the respondent is in the experimental group, 0 if he is in the control group.

<sup>23</sup> Scale scores were computed by the method of summated ratings. For the time orientation, anomy, and traditionalism scales, the standard four Likert categories with the neutral categories excluded were used. For the remaining scales the codes used for the items (reported above) were summed. For missing data scale scores were assigned on the basis of sample mean scores. The following table shows the matrix of Pearson r's for the eight scales:

CORRELATION MATRIX OF FULL SCALES (N=1166)

	1	2	3	4	5	6	7	8
1. Time orientation	1.000							
2. Anomy	.505	1.000						
3. Occupational flexibility	.061	.048	1.000					
4. Traditionalism	.358	.431	.068	1.000				
5. Reservation wage	.036	.059	.312	.066	1.000			
6. Job satisfaction	.063	.112	-.118	.108	-.015	1.000		
7. Work motivation	.083	.044	.071	.126	.082	.085	1.000	
8. Ideal job aspirations	.046	.041	.035	.110	.041	.080	.088	1.000

The table shown below reports the means of these eight full scales by experimental status:

MEANS AND STANDARD DEVIATIONS OF FULL SCALES  
BY EXPERIMENTAL STATUS

	<u>Experimentals</u>	<u>Controls</u>
Time orientation	6.234 (3.167)	6.124 (3.137)
Anomy	5.014 (2.721)	4.934 (2.692)
Occupational flexibility	2.143 (1.278)	2.030 (1.307)
Traditionalism	5.676 (2.526)	5.641 (2.301)
Reservation wage	2.097 (1.564)	2.250 (1.673)
Job satisfaction	5.017 (1.608)	4.902 (1.685)
Work motivation	.943 ( .527)	.953 ( .546)
Ideal job aspirations	3.827 (2.693)	3.675 (2.699)
	N = 698	N = 468

Since the standard errors for the full scales were large, probably due to crude measurement procedures, each of the scales was eventually dichotomized into high versus low values, thereby increasing the reliability and thus the confidence in the interpretation of the results. Separate analyses were

carried out for the full scales; however, the results did not differ from those presented here. Except for work motivation and job aspirations, each scale was dichotomized at the median of its distribution. Work motivation was left collapsed into the three categories described in fn. 19. Ideal job aspirations was dichotomized into the white-collar occupations, craftsmen, and foremen, versus all others.

<sup>24</sup> Note that in this equation time orientation and anomy do not operate in the same manner, a fact which further reinforces the original decision to divide factor one into these two different scales.

<sup>25</sup> The reservation wage and job satisfaction scales were not included in the index because their relevance to the culture of poverty syndrome is not clear.

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