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THE MOTIVATION TO WORK. SPECIAL SUPPLEMENT TO "THE SELECTION OF TRAINEES UNDER MDTA".

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THE PURPOSE OF THIS STUDY WAS TO BUILD A SET OF MEASURES WHICH WOULD PROVIDE INSIGHT INTO PEOPLE'S "MOTIVATION TO WORK." A SYSTEMATIC 10 PERCENT SAMPLE, 1,958 PERSONS, WAS DRAWN FROM THE REGISTERED POPULATION OF THE NEWARK EMPLOYMENT SERVICE IN LATE 1964. A SAMPLE OF 500 PERSONS, CLASSIFIED INTO EIGHT CATEGORIES ON THE BASIS OF A PREVIOUS MANPOWER AND DEVELOPMENT TRAINING ACT (MDTA) STUDY (VT 002 654), WAS INTERVIEWED BY USE OF SIX INSTRUMENTS DEVELOPED FOR THIS STUDY WHICH MEASURED (1) MOTIVE TO WORK, (2) EXPECTANCY TO WORK, (3) INCENTIVE TO WORK, (4) MOTIVE TO AVOID WORK, (5) EXPECTANCY TO AVOID WORK, AND (6) INCENTIVE TO AVOID WORK. SCORES FROM THE FIRST THREE INSTRUMENTS WERE MULTIPLIED TO FORM A MATHEMATICAL PRODUCT, "MOTIVATION TO WORK," AND SCORES FROM THE SECOND THREE INSTRUMENTS WERE MULTIPLIED TO FORM A MATHEMATICAL PRODUCT, "MOTIVATION TO AVOID WORK." THE DIFFERENCE BETWEEN THESE MATHEMATICAL PRODUCTS WAS "RESIDUAL BEHAVIOR-POTENTIAL TO WORK." SOME FINDINGS WERE--(1) AMONG THOSE WHO HAD COMPLETED MDTA TRAINING, THERE WERE LOWER PROPORTIONS OF INDIVIDUALS WITH HIGH MOTIVE TO WORK AND HIGHER PROPORTIONS WITH HIGH MOTIVE TO AVOID WORK, (2) THE EMPLOYED TENDED TO SCORE RELATIVELY HIGH ON MOTIVE TO WORK AND EXPECTANCY TO WORK, AND LOW ON MOTIVE TO AVOID WORK, EXPECTANCY TO AVOID WORK, AND INCENTIVE TO AVOID WORK, AND RELATIVELY LOW ON INCENTIVE TO WORK. IT WAS CONCLUDED THAT THE BEHAVIOR-POTENTIAL TO WORK MEASURE DID SHOW SIGNIFICANT RELATIONSHIPS, THOUGH OF SMALL SIZE, WITH THOSE VARIABLES WHICH COMMON SENSE SUGGESTS ARE RELATED TO MOTIVATION TO WORK, AND THAT POSITIVE AND NEGATIVE RELATIONSHIPS RAN IN THE EXPECTED DIRECTION. A SAMPLE INSTRUMENT AND A DESCRIPTION OF THE STUDY SAMPLE ARE INCLUDED. (EM)

THIS REPORT IS A SPECIAL SUPPLEMENT TO
"THE SELECTION OF TRAINEES UNDER MDTA"

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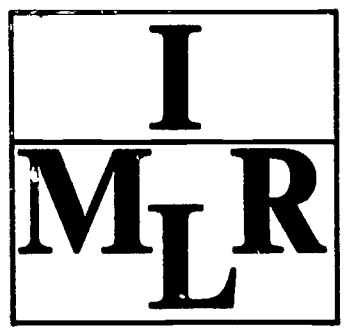

The Motivation To Work

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*Mr. Donald Noone, Teaching Assistant in the Department of Sociology, assisted in the preparation of data described in this supplement.

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PREFACE

This report should be viewed as a supplementary report to The Selection of Trainees Under MDTA, by Jack Chernick, Roger Craig and myself--all of the Research Program of the Institute of Management and Labor Relations, Rutgers - The State University. It is an exploratory attempt to build a measure or, more accurately, a set of measures that hopefully will enable us to accumulate more systematic insight into the area of people's "motivation to work." At this stage of our knowledge even a crude measure in this area would be very useful. The present study indicates that we have developed such a measure.

The data for Motivation to Work were accumulated from the analysis of data obtained from 500 persons during the interviewing phase of the larger study, The Selection of Trainees Under MDTA. Detailed description of the sample is presented in Appendix B.

My special thanks are extended to Mr. Donald Noone who was of great assistance in the completion of this project.

Bernard P. Indik

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MOTIVATION TO WORK

The frequently heard comment about the unemployed is that they are lazy, unmotivated, and without ambition or, more generally, that they do not desire to work. Is such an observation valid or is it the result of a social bias?

A clear answer to this question can be provided through the development of techniques for measuring human motivation--in this case the "motivation to work." Measurement is needed for two important reasons. First, there is a conflict among observers of the labor force about the proportion of unemployed workers who remain unemployed because of lack of motivation. Second, and perhaps more important, a measure of motivation is needed as a criterion for predicting probability of success or failure in training programs or re-employment. The purpose of this project, therefore, was to develop an empirical measure of "motivation to work." This study reports an exploratory attempt to develop such a measure.

The Theoretical Components of Motivation

The theoretical structure for this analysis is built upon the work of McClelland, et. al.,* Atkinson,** and Atkinson.*** Their basic

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*McClelland, D. C., Atkinson, J. W., Clark, R. A., and Lowell, E. L., The Achievement Motive (New York: Appleton-Century, 1953).

**Atkinson, J. W., (Editor), Motives in Fantasy, Action and Society (Princeton: D. Van Nostrand, 1958).

***Atkinson, J. W., Introduction to Motivation (Princeton: D. Van Nostrand, 1964).

assumption holds that there are three main "approach" aspects and three basic "avoidance" aspects of human motivation.

An individual's motivation toward a goal can be subdivided into three parts for analysis: his motive toward it (deepseated need for it), his expectancy of obtaining it, and its present incentive value to him. Conversely, his motivation to avoid an object or situation can be divided into his motive to avoid it, his expectancy of doing so, and the present incentive value of avoiding it.

With this frame of reference we can conceptualize the following:

> Motive to Work is the strength of the want or need that impels an individual toward a goal or class of goals implicit in work.
>
> Motive to Avoid Work is the strength of the want or need to prefer nonwork environments.
>
> Expectancy to Work is the subjective probability of actually attaining the goals sought in working.
>
> Expectancy to Avoid Work is the subjective probability of actually avoiding work situations.
>
> Incentive to Work is the felt value of the goals attached to working that would specifically induce an individual to work.
>
> Incentive to Avoid Work is the felt value of avoiding work situations--a preference for specific alternatives to work.

There is evidence* that the relationship between motive, expectancy, and incentive is multiplicative: the first three dimensions can be multiplied to obtain a generalized "motivation to work."

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*Atkinson, J. W., Introduction to Motivation (Princeton: D. Van Nostrand, 1964), pp. 240-268.

Similarly, the latter three can be multiplied to obtain a generalized "motivation to avoid work." The "motivation to work" minus the "motivation to avoid work" will then yield a "residual behavior potential to work."

This theoretical approach specifies that motives are more basic and less likely to change over time than are expectations and incentives. Expectations and incentives change due to situations and events of the present and immediate past, while motives in large measure are more stable and are developed earlier in the lifetime of the individual. It is, however, the contemporaneous level of these motivational components that is relevant to the prediction in question, since the past is influential only to the degree that it affects differential levels of these motivational components.

Measuring Motivation

Each of these motivational components is defined in detail conceptually and operationally in Appendix A. Each of the six motivational concepts was operationally defined by responses to a series of questions. The items used are listed in Appendix A. Those finally included as part of a scale measure of a particular concept had to fulfill the following requirements. They had to fit the specific concept and show a high positive correlation with the total scale score measure of that concept, and they had to show a generally positive correlation with the other items in the same scale and a higher average correlation among items in the same scale than with items in the other five motivational scales.

MEASURING MOTIVATION

Motive to Work	X	Expectancy to Work	X	Incentive to Work	=	Motivation to Work
						minus
Motive to Avoid Work	X	Expectancy to Avoid Work	X	Incentive to Avoid Work	=	Motivation to Avoid Work

= Residual Behavior Potential to Work(±)*

*For prediction of employment status at a given point in time, Residual Behavior Potential to Work must be considered in company with other variables as yet unspecified.

Appendix A also presents detailed technical information about the development of the measures for each of these six concepts.

Tests confirmed (Appendix A) that the items within these six scales fulfill the requirements adequately. The item-total correlations within each scale were high and positive. There was also a general positive correlation between items within the same scale and a higher average correlation among items in the same scale than with items in the other motivational scales. These results indicated that each of the six scales is internally coherent and reasonably reliable. Each scale measures a dimension that is essentially independent of each of the others.

The Validity of the Motivational Measures

The question of the validity of the scales was also examined. It is important, first of all, to note that within each scale the items developed fell within the framework of each of the six concepts; that is, in order to be placed within a given scale an item had to fit that particular concept. Furthermore, the study itself yielded external behavioral indicators which should show correlation or covariation with each of the specific motivational measures. Although these behavior indicators are not ideal, they permit us to amplify our understanding of the meaning of the six scales.

Two major behavioral indicators were available--present employment status and MDTA status. (See Appendix B.) Before results are presented, however, it should be noted that samples were drawn from the

various MDTA categories; we did not systematically sample the employed, the unemployed, and those not in the labor force. People in the latter three categories, therefore, are not samples in any strict sense. In this case they are all members of a sample of individuals who were listed in the recent past with the Employment Service and who are now in these three status categories. (See Appendix B.) They are not as different from each other as samples accumulated randomly from the population at large. This being the case, categorical differences found in motivational characteristics will be smaller in our sample than in a real random sample of persons presently employed, unemployed, and not in the labor force.

Motive Measures

Interestingly enough, the motive to work measures did show a relationship with present employment status. Table 1 shows that 60.8 percent of those presently employed scored over 25 on our motive to work measures. Over 59 percent of those who are presently unemployed and 46 percent of those who are presently not in the labor force scored over 25. Both the employed and the unemployed showed a large proportion with high motive to work, whereas those not in the labor force showed a lower proportion in this category. Fifty-three percent of those presently employed showed scores of 14 or under on the motive to avoid work measure, and 43.6 percent of the presently unemployed and 18.9 percent of those presently not in the labor force scored 14 or under on this measure. (See Table 2.)

TABLE 1

EMPLOYMENT STATUS AND MOTIVE TO WORK

Motive To Work	Employed	Unemployed	NLF	
10-12	1.0	0.0	2.7	
13-15	3.6	2.6	5.4	
16-18	5.4	5.4	2.7	
19-21	13.5	13.0	18.9	
22-24	15.7	18.3	18.9	
25-27	32.9	30.6	18.9	
28-30	27.9	28.5	27.1	
No Data	0.0	1.6	5.4	
Total	100.0	100.0	100.0	
N=	273	186	37	500*

*Data for two individuals who had obtained part-time employment and two individuals who were not classified with reference to employment are not shown in the body of the table since the number of people in these categories is too small for analysis.

TABLE 2

EMPLOYMENT STATUS AND MOTIVE TO AVOID WORK

Motive to Avoid Work	Employed	Unemployed	NLF	
6-8	14.3	11.8	2.7	
9-11	21.0	16.2	8.1	
12-14	17.7	15.6	8.1	
15-17	16.5	19.4	16.2	
18-20	13.9	19.4	29.8	
21-23	8.7	9.1	18.9	
24-26	6.5	4.3	8.1	
27-30	1.4	2.6	2.7	
No Data	0.0	1.6	5.4	
Total	100.0	100.0	100.0	
N=	273	186	37	500*

*Data for two individuals who had obtained part-time employment and two individuals who were not classified with reference to employment are not shown in the body of the table since the number of people in these categories is too small for analysis.

Theoretically, one might have expected the scores of the employed to be higher than those of the unemployed on motive to work; however, the data indicated that the two distributions of scores were very similar. Both of these sets of scores were higher on the average than for those not in the labor force. As expected, the employed showed higher proportions of low scores on the motive to avoid work than did the unemployed. The proportion scoring low in motive to avoid work was smallest for those not in the labor force. When the two measures were combined--that is, when the scores for motive to avoid work were subtracted from the scores for the motive to work--the residual scores were highest for the employed, moderate for the unemployed, and lowest for those not in the labor force. These results, of course, confirmed our expectations, and suggest that the two measures together were performing adequately.

This being the case, it seemed useful to explore whether these measures would be useful predictors of success in MDTA programs. In discussions, the selection officers mentioned their attempts to consider motivation but felt that the lack of some systematic measures impeded their efforts. They had, however, access to information on education, work history, age, family status, and abilities measures, and these seemed to be the major selection criteria. Systematic motivational measures were <u>not</u> available or used in the selection process.

Examination of the scores on motivational measures made by persons in the several MDTA categories at the time of interview did yield useful, and sometimes surprising, insights, although the data were

necessarily of an ex post facto nature. Among the completers, only 43 percent scored 25 or more on motive to work, the smallest percentage found in any of the categories. Fifty-three percent of the dropouts made similar scores, as did 61 percent of the accepted pending category; 56 percent of the rejectees, and 57 percent of those who refused training. The highest percentage scoring 25 or over was made by those who had had no contact with MDTA training--65 percent. (Table 3.)

Conversely, in examining the scores on the motive to avoid work, we found that 28 percent of those who completed training scored 21 or over, the highest percentage for any MDTA category. (Table 4.) Only 16 percent of those who were dropouts scored this highly, whereas 27 percent of those who were accepted pending the start of training did as well.

Other groupsregistered small proportions of persons highly motivated to avoid work: 20 percent among those rejected by the selection officers, 20 percent among the individuals who rejected the training program, and only 14 percent among those who had had no contact with the training program.

In summary, the results above clearly indicate that among the completers there were lower proportions of individuals with high motive to work and higher proportions of individuals with high motive to avoid work than in the other categories of MDTA status. But consider who the completers were: A majority were women, some of whom have to

TABLE 3

MDTA STATUS AND MOTIVE TO WORK

Motive to Work	Completed Training	Dropout	Accepted Pending	Rejected by MDTA	Rejected MDTA	No Contact	
10-12	0.0	3.0	2.0	2.0	0.0	0.0	
13-15	6.0	5.0	0.0	5.0	1.0	4.0	
16-18	6.0	5.0	7.0	7.0	7.0	4.0	
19-21	17.0	13.0	5.0	20.0	12.0	13.0	
22-24	26.0	18.0	25.0	10.0	22.0	13.0	
25-27	24.0	35.0	24.0	38.0	28.0	34.0	
28-30	19.0	18.0	37.0	18.0	29.0	31.0	
No Data	2.0	3.0	0.0	0.0	1.0	1.0	
Total	100.0	100.0	100.0	100.0	100.0	100.0	
N=	53	38	55	40	76	229	500*

*Two additional people were available for this analysis. The two individuals in the In Training MDTA Status and seven individuals in the Did Not Report MDTA Status have been deleted from the detailed breakdown since the number of people in these categories is too small for analysis.

TABLE 4

MDTA STATUS AND MOTIVE TO AVOID WORK

Motive to Avoid Work	Completed Training	Dropout	Accepted Pending	Rejected By MDTA	Rejected MDTA	No Contact	
6-8	11.3	15.8	0.0	10.0	15.8	9.6	
9-11	9.4	21.2	23.8	7.5	15.8	21.4	
12-14	13.2	13.1	20.0	15.0	19.8	16.6	
15-17	17.1	21.2	12.7	20.0	10.5	20.2	
18-20	19.1	10.5	14.5	27.5	17.1	16.6	
21-23	15.0	7.8	16.4	10.0	15.8	6.5	
24-26	7.5	5.2	7.2	7.5	3.9	6.1	
27-30	5.6	2.6	3.6	2.5	0.0	1.7	
No Data	1.8	2.6	1.8	0.0	1.3	1.3	
Total	100.0	100.0	100.0	100.0	100.0	100.0	
N=	53	38	55	40	76	229	500*

*Two additional cases were available for this analysis. The two individuals in the In Training MDTA Status and seven individuals in the Did Not Report MDTA Status have been deleted from the detailed breakdown since the number of people in these categories is too small for analysis.

work of necessity but who might prefer to stay at home with dependent children, and some were men who were unable to locate steady work despite training.

It should be noted that a very large proportion of individuals in the no contact category seem to have higher motive to work and lower motive to avoid work. (See Tables 3 and 4.) One possible explanation may be that these persons believed they could obtain a job on their own and doubted that the Employment Service could help them. Their scores also suggest that the MDTA program is not tapping this category as heavily as it might. In other words, there are proportions of individuals with high motive to work who are not brought into the training program, either because they have lower aptitude and educational attainments, or because they have not been contacted, or because they prefer to do job seeking on their own.

Expectancy Measures

As anticipated, when employment status was related to expectancy measures, the employed scored higher than the unemployed on expectation to work and lower than the unemployed on expectation to avoid work. However, those not in the labor force provided a surprise, ranking between the other two categories on both scales--a finding which may be traced to their personal characteristics.

Specifically, among those who were employed at the time of the interview, approximately 50 percent showed a score of 39 or more; whereas, among the unemployed, 41.8 percent reached this level--results which

show a significant difference in the expected direction. (See Table 5.) But among those not in the labor force, 48.6 percent scored above 39 placing this category closer to the employed than the unemployed in expectancy to work. This puzzling finding may be due to the special characteristics of those out of the labor force: they were predominantly Negro married females and, in general, older than the other two categories. Hence, they may have had less desire to work, but realistic expectations of working in the future as they have had to in the past. (See Table 6.)

The same phenomenon occurred when the scores of the three employment categories were examined with reference to expectation of avoiding work. Again, as anticipated, a much larger proportion of the employed than of the unemployed registered low avoidance scores--54.7 percent of the former to 38.8 percent of the latter. (See Table 7.) Again, however, those out of the labor force ranked between the other two categories with 48.7 percent scoring similarly low, a result which indicates that they had less expectation of avoiding work than did the unemployed. As pointed out above, one plausible explanation lies in the special characteristics of the group who were out of the labor force.

Data collected from individual interviews demonstrate both the operation of the scales discussed thus far, and the confusion which can arise when scores are interpreted without reference to personal characteristics. Interview respondents were asked several open-ended questions, including a query about the type of work they preferred and

TABLE 5

EMPLOYMENT STATUS AND EXPECTANCY TO WORK

Expectancy To Work	Employed	Unemployed	NLF	
19-22	1.4	1.6	2.7	
23-26	4.0	8.0	0.0	
27-30	5.4	10.2	8.1	
31-34	15.3	15.0	16.3	
35-38	23.9	21.8	18.9	
39-42	25.2	18.3	18.9	
43-46	17.9	13.9	18.9	
47-50	6.9	9.6	10.8	
No Data	0.0	1.6	5.4	
Total	100.0	100.0	100.0	
N=	273	186	37	500*

*Data for two individuals who had obtained part-time employment and two individuals who were not classified with reference to employment are not shown in the body of the table since the number of people in these categories is too small for analysis.

TABLE 6

EMPLOYMENT STATUS AND VARIOUS DEMOGRAPHIC CHARACTERISTICS

(Interview Sample Completed)

	Employed	Unemployed	NLF
Percent age 45 and over	25.2	27.5	37.9
Percent female	42.1	51.1	70.3
Percent married	57.6	56.4	73.0
Percent Negro	57.2	61.8	59.5

TABLE 7

EMPLOYMENT STATUS AND EXPECTANCY TO AVOID WORK

Expectancy To Avoid Work	Employed	Unemployed	NLF	
10-14	24.1	15.7	21.6	
15-19	30.6	23.1	27.1	
20-24	27.3	27.6	21.6	
25-29	13.1	15.5	13.5	
30-34	3.6	8.0	8.1	
35-39	0.3	6.9	2.7	
40-44	1.0	1.6	0.0	
No Data	0.0	1.6	5.4	
Total	100.0	100.0	100.0	
N=	273	186	37	500*

*Data for two individuals who had obtained part-time employment and two individuals who were not classified with reference to employment are not shown in the body of the table since the number of people in these categories is too small for analysis.

another about how they preferred to use their time. In reply to the former question one respondent said: "I wouldn't care what kind of job it was, I want to make a living." When his motivation scores were checked, they provided a textbook illustration of his stated attitude: he scored very high on motive to work, very low on motive to avoid work, high in expectancy to work, low in expectancy to avoid work.

In another case, however, motive scales scores were confusing when compared to the respondent's remarks. Asked "How do you like to spend your time?" he said: "Resting, because it is most important." Yet his motive to work score was high and his motive to avoid work score was low. At the time, his expectation to avoid work was higher than his expectancy to work. However, further analysis of the information obtained from him showed that he was a male Negro, age 28, with a wife and eight children. He was forced to drop out of a training course because of an inadequate subsistence allowance and at the time of the interview was in the hospital after being hurt on the job. Seemingly, then, his momentary situation influenced his expectancies but not his motives, a reaction wholly compatible with the theory. Knowledge about how his situation affected his expectancies helped dispel the initial confusion.

In general, however, the expectancy measures performed much more satisfactorily in regard to employment status than they did in regard to MDTA status. In fact, the scoring pattern which emerged for most MDTA categories is still largely unexplained.

The expectancy scores for the various MDTA categories largely followed the pattern established with respect to scores on motive to work. The no contact group ranked highest in expectancy to work with 54.3 percent of its members scoring 39 or better. (See Table 8.) The proportions of other categories scoring similarly high were the following: 52.8 percent of those accepted pending the start of training; 47.5 percent of those rejected by MDTA; 38.0 percent of those who rejected training; 33.9 percent of those who completed training; and 26.3 percent of the dropouts.

These findings like those with reference to the motive to work showed that both the motive to work and the expectancy to work were relatively low among both those who completed training and those who dropped out. The no contacts, on the other hand, were highest on both of these dimensions. Those who had been rejected by the selection process fell between those who had been in training programs (completers and dropouts) and those who had had no contact with MDTA training. Clearly, these measures did not distinguish these groups so that they could be used as selection criteria for successfully predicting who would complete training. It is possible, therefore, that in terms of motivational considerations the wrong people are presently being given skill training. An even more likely possibility exists. That is, possibly motivational components of prediction for success in employment are not the same as those for success in training.

TABLE 8

MDTA STATUS AND EXPECTANCY TO WORK

Expectancy To Work	Completed Training	Dropout	Accepted Pending	Rejected By MDTA	Rejected MDTA	No Contact	
19-22	0.0	7.8	3.6	2.5	0.0	0.4	
23-26	3.7	10.5	7.2	15.0	2.6	3.0	
27-30	9.4	2.6	5.4	2.5	11.8	8.7	
31-34	24.7	18.4	7.2	15.0	22.4	12.6	
35-38	26.5	31.8	23.8	17.5	23.9	19.7	
39-42	18.9	23.7	20.0	10.0	18.4	26.5	
43-46	13.2	0.0	21.9	27.5	13.1	17.4	
47-50	1.8	2.6	10.9	10.0	6.5	10.4	
No Data	1.8	2.6	0.0	0.0	1.3	1.3	
Total	100.0	100.0	100.0	100.0	100.0	100.0	
N=	53	38	55	40	76	229	500*

*Two additional people were available for this analysis. The two individuals in the In Training MDTA Status and seven individuals in the Did Not Report MDTA Status have been deleted from the detailed breakdown since the number of people in these categories is too small for analysis.

Turning to the relationship between MDTA status and scores on the expectancy to avoid work scale, we found a pattern not particularly perplexing in itself, but puzzling when compared with the results of the measure of expectancy to work. As logic would anticipate, the largest proportion of low "avoidance" scores occurred among those who had completed the courses, 53 percent scoring 19 or less on the scale. (See Table 9.) Dropouts ranked a close second with 52.7 percent registering a similarly low score. The proportion of other categories in the low score bracket were the following: those who had no contact with MDTA, 48.5 percent; those who rejected training, 43.4 percent; and those rejected by MDTA, 37.5 percent. The last score suggests that a reasonably large proportion of individuals in the rejected category indicate relativ ly high expectancy to avoid work. And, in fact, over 22 percent of this category showed very high expectancy to avoid work registering scores of 30 or over; whereas much lower proportions were found at this score level in the other seven MDTA status categories.

How can these findings be explained? It seems possible, for example, that those who were rejected by the training program were individuals who manifested a somewhat higher expectancy to avoid work. However, they were not correspondingly low on expectancy to work. Equally puzzling, dropouts and completers were low in expectancy to avoid work but not expecially high in expectancy to work. Those who rejected MDTA were moderate in expectancy to work, but seem to be divided into two subgroups in regard to the expectancy to avoid work scale: one

TABLE 9

MDTA STATUS AND EXPECTANCY TO AVOID WORK

Expectancy To Avoid Work	Completed Training	Dropout	Accepted Pending	Rejected By MDTA	Rejected MDTA	No Contact	
10-14	26.5	15.7	16.3	15.0	19.7	21.4	
15-19	26.5	37.0	31.1	22.5	23.7	27.1	
20-24	28.4	23.8	25.5	27.5	25.2	28.1	
25-29	15.0	15.7	12.7	12.5	19.7	12.6	
30-34	0.0	5.2	9.0	15.0	5.2	5.2	
35-39	1.8	0.0	1.8	5.0	5.2	3.0	
40-44	0.0	0.0	3.6	2.5	0.0	1.3	
No Data	1.8	2.6	0.0	0.0	1.3	1.3	
Total	100.0	100.0	100.0	100.0	100.0	100.0	
N=	53	38	55	40	76	229	500*

*Two additional people were available for this analysis. The two individuals in the In Training MDTA Status and seven individuals in the Did Not Report MDTA Status have been deleted from the detailed breakdown since the number of people in these categories is too small for analysis.

tending to score high and the other tending to score low.* Finally, those having no contact with the program perform in a straightforward fashion: a large proportion express high expectancy to work and low expectancy to avoid work. This group, obviously, demonstrates the reciprocity in expectancy scores that was anticipated, but absent, in other categories.

Clearly, then, we find interesting but unexpected relationships between expectancy measures and MDTA status. The relationship of the expectancy measures with reference to employment were much more predictable.

Incentive Measures

Atkinson's theory of motivation, described earlier in this chapter, states that incentive bears an inverse relationship to expectancy; that is, as expectancy increases, incentive decreases.** Translating that statement into the terms of this study, higher expectancies to work should be associated with lower incentives to work. For example, employed persons logically should show higher expectancy to work and lower incentive to work than unemployed persons.

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*The latter finding may reflect the presence of two different kinds of individuals in this category, one, the type of person who says "I can get a job on my own," and the other the type who says, "I really don't expect to get work."

**Atkinson, J. W., An Introduction to Motivation, p. 242. Empirical support for this relationship was reported by G. H. Litwin in McClelland, D. C., The Achieving Society (Princeton: D. Van Nostrand Company, Inc., 1961).

Our findings demonstrated this relationship rather well. When the scale measuring incentive to work was applied to respondents classed by employment status, very low incentive scores (below 12) were registered by 32.9 percent of those who were employed, 26.3 percent of those who were unemployed, and 18.9 percent of those who were out of the labor force score. (See Table 10.) This would indicate that those who were working showed generally lower incentive to work scores than those who were not working. The higher scores fell more frequently within the category of those not in the labor force. Data presented earlier showed higher expectancy to work among the employed than among the unemployed. The reciprocal relationship does not hold for those not in the labor force.

In addition to the theoretical explanation of the inverse relationship between incentive to work and expectancy to work, one might explain the order of the incentive scores of the various employment groups in terms of relative deprivation. That is, those who are working presently suffer no deprivation of employment and value the work situation less highly. Those who are unemployed and not in the labor force tend to attach a higher value to work, precisely because they are denied access to the rewards entailed in working.

These suppositions are borne out in our findings. These indicate that those individuals who were working at the time of interview placed a lower valuation on work than those who were not working.

TABLE 10

EMPLOYMENT STATUS AND INCENTIVE TO WORK

Incentive To Work	Employed	Unemployed	NLF	
1-3	0.0	0.5	0.0	
4-6	0.0	0.0	0.0	
7-9	1.8	1.0	2.7	
10-12	31.1	25.3	16.2	
13-15	43.4	45.9	48.7	
16-18	21.9	24.1	24.3	
19-21	1.8	1.6	2.7	
No Data	0.0	1.6	5.4	
Total	100.0	100.0	100.0	
N=	273	186	37	500*

*Data for two individuals who had obtained part-time employment and two individuals who were not classified with reference to employment are not shown in the body of the table since the number of people in these categories is too small for analysis.

Atkinson suggests* that the incentive to avoid failure is equal to the reciprocal of the expectancy of success. Our parallel theory would suggest that incentive to avoid work would equal the reciprocal of expectancy to work. This means that high expectancy to work would be associated with low incentive to avoid work and low expectancy to work would be associated with high incentive to avoid work. The general finding yielded by our data is that most individuals in all three work status categories tended to show low scores (three or less) on our incentive to work scale (see Table 11); however, there was a slight tendency for the employed to show the least incentive to avoid work. About 52 percent of the latter scored three or less on this scale, with only 46 percent of each of the other two categories making similar scores. On the other hand, a larger proportion of those not in the labor force made high scores. The scores of the unemployed category tended to fall somewhat closer in their distribution to the scores of persons out of the labor force with reference to incentive to avoid work. This finding does not agree with the Atkinson theory. It does seem to make common sense since those individuals who are presently working might well have lower preference to avoid work than individuals who are presently unemployed or out of the labor force. These findings support the relative deprivation explanation.

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*Atkinson, J. W., Introduction to Motivation (Princeton: D. Van Nostrand, 1964), p. 244.

TABLE 11

EMPLOYMENT STATUS AND INCENTIVE TO AVOID WORK

Incentive to Avoid Work	Employed	Unemployed	NLF	
0-1	40.1	33.7	40.6	
2-3	11.8	12.3	5.4	
4-5	11.8	9.1	5.4	
6-7	10.2	8.5	2.7	
8-9	11.3	13.4	10.8	
10-11	9.5	16.6	18.9	
12-13	4.3	4.3	10.8	
14-15	1.0	0.5	0.0	
No Data	0.0	1.6	5.4	
Total	100.0	100.0	100.0	
N-	273	186	37	500*

*Data for two individuals who had obtained part-time employment and two individuals who were not classified with reference to employment are not shown in the body of the table since the number of people in these categories is too small for analysis.

In exploring the next facet of the data--levels of incentive to work and incentive to avoid work among the various MDTA status categories--several interesting relationships appeared. Two MDTA status categories showed a high incentive to work. The first, though small in number, included those who did not report for training or dropped out in the first week of training. The second consisted of those who were rejected by the MDTA officer; 82.5 percent of this category showed scores of 13 or above on incentive to work. (See Table 12.) Individuals who completed training showed the smallest percentage who were high on incentive to work (60.5 percent at 13 or above). Those who had no contact with the program were between the first two groups and those who completed training, about 70 percent, scoring 13 or over in the incentive to work scale.

What might these findings mean? If incentive to work bears an inverse relationship to the expectancy to work as stated earlier,* then this in itself explains the low incentive score of completers, for the completers have the highest proportion of employed of any of the MDTA categories. Further, the employed tended to score lowest in incentive to work; therefore, if completers tend to be employed, this also would insure a low incentive score. Certainly those who dropped out early or were rejected by the selection procedure seem to have a high incentive to work also, though the latter similarly show a relatively high expectancy to avoid work.

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*Atkinson, J. W., An Introduction to Motivation (Princeton: D. Van Nostrant Co., Inc., 1964), pp. 69 and 242.

TABLE 12

MDTA STATUS AND INCENTIVE TO WORK

Incentive To Work	Completed Training	Dropout	Accepted Pending	Rejected By MDTA	Rejected MDTA	No Contact	
1-3	0.0	0.0	0.0	0.0	0.0	0.4	
4-6	0.0	0.0	0.0	0.0	0.0	0.0	
7-9	1.8	0.0	0.0	0.0	1.3	3.0	
10-12	35.9	28.9	30.9	17.5	31.5	25.3	
13-15	39.8	50.1	40.1	57.5	46.2	43.5	
16-18	20.7	18.4	25.4	25.0	19.7	23.5	
19-21	0.0	0.0	3.6	0.0	0.0	3.0	
No Data	1.8	2.6	0.0	0.0	1.3	1.3	
Total	100.0	100.0	100.0	100.0	100.0	100.0	
N=	53	38	55	40	76	229	500*

*Two additional people were available for this analysis. The two individuals in the In Training MDTA Status and seven indivudals in the Did Not Report MDTA Status have been deleted from the detailed breakdown since the number of people in these categories is too small for analysis.

The relationship between incentive to avoid work and MDTA status was also explored. Although people in all eight categories showed low incentive to avoid work, the dropouts and those rejected by the selection officers had the largest proportions scoring extremely low (three or less on the scale) suggesting that the majority in these two categories tend to have little incentive to avoid work. (See Table 13.)

There was, however, a counter trend for some of the dropouts. A rather large proportion of these individuals also fell at the high end of the scale. This may indicate that there are two kinds of individuals among the dropouts: first, persons who prefer work and score low in incentive to avoid work; and second, another contingent which drops out of training because of high incentive to avoid work, since work is a natural consequence of completing the training program. The category having no contact with the program also showed a majority with low incentive to avoid work. This finding may indicate that some of these people prefer to get work on their own or that they are a potential source of recruits for training that has not been tapped.

Profiles

In summary, we can profile and characterize the employed as follows: they tend to score relatively high on motive to work, low on motive to avoid work, high on expectancy to work, and low on expectancy to avoid work. Interestingly enough, they score relatively low on incentive to work but also score low on incentive to avoid work.

TABLE 13

MDTA STATUS AND INCENTIVE TO AVOID WORK

Incentive to Avoid Work	Completed Training	Dropout	Accepted Pending	Rejected By MDTA	Rejected MDTA	No Contact	
0-1	30.4	34.4	40.2	40.0	29.1	42.3	
2-3	17.0	18.5	7.2	12.5	15.8	8.7	
4-5	11.3	5.2	12.7	7.5	18.5	7.8	
6-7	15.2	7.8	5.4	10.0	7.8	8.2	
8-9	5.6	7.8	12.7	12.5	14.4	13.5	
10-11	13.2	18.5	14.6	10.0	11.8	12.2	
12-13	3.7	2.6	7.2	7.5	1.3	5.2	
14-15	1.8	2.6	0.0	0.0	0.0	0.0	
No Data	1.8	2.6	0.0	0.0	1.3	1.3	
Total	100.0	100.0	100.0	100.0	100.0	100.0	
N=	53	38	55	40	76	229	500*

*Two additional people were available for this analysis. The two individuals in the In Training MDTA Status and seven individuals in the Did Not Report MDTA Status have been deleted from the detailed breakdown since the number of people in these categories is too small for analysis.

The unemployed, on the other hand, while being relatively high on motive to work, also seem to be moderately high on motive to avoid work and low on expectancy to work while being high on expectancy to avoid work. They would be considered moderate on incentive to work and moderately low on incentive to avoid work. Remembering their special composition, those not in the labor force seem to come out as follows: they are low on motive to work, high in motive to avoid work, moderately high in their expectations to work, and also moderately high in their expectancy to avoid work. They are high in incentive to work and moderately low in incentive to avoid work. Putting these pieces of information together it seems likely that in terms of total motivation to work (residual behavior potential to work) the employed would turn out to be higher than the unemployed, which is exactly as one would expect from our initial theoretical position. As will be noted below, this is confirmed.

Turning now to the characterization of the various categories of individuals that we have been studying with reference to MDTA status, the motivational picture is somewhat less clear and understandable. The completers showed the lowest motive to work on the average of any of the MDTA status categories. However, they also showed the highest motive to avoid work of any of the seven groups. They were relatively low but not the lowest in expectancy to work. They were the lowest, however, in expectancy to avoid work. They were also the lowest in incentive to work and relatively high in incentive to avoid work. Clearly our motivational measures did not indicate that the completers were highly motivated toward working.

In contrast one may look at the individuals who were in the no contact category. They were the highest in motive to work and next to lowest in motive to avoid work. They were the highest in expectancy to work, while being only moderate in expectancy to avoid work. They were moderate in incentive to work and relatively low in incentive to avoid work. This group seemingly was the more motivated group to obtain work--quite different from those who completed training. Seemingly, then, the individuals who were completers were relatively low on the positive motivational measures. On the other hand, the no contacts, while being quite high on the positive motivators for work, as we pointed out earlier, were quite low in the abilities and aptitudes areas.

These findings indicate, however, that different kinds of people would need different sorts of programs in order to maximize their probability for being employed in the future. For example, one could suggest that those who are like our completers would tend to benefit from courses attempting to improve their motivation by working on their expectancies or incentives to work. On the other hand, the no contacts seemed to need basic educational information and skill training. Characterizing one of the other MDTA status groups, it is interesting to point out that, on the average, dropouts from training courses tended to be lowest on expectancy to get work but also low in terms of incentive to avoid work. That is, while they did not seem to prefer a nonwork situation, their expectations about getting work were low.

Among those who rejected the MDTA program, there was a proportion who were relatively high on their preference for avoiding work and who were also high on their expectations to avoid work. However, there was also a contingent in this group whose motive to work was also relatively high. Those who have been rejected by MDTA show the highest expectancy of avoiding work--that is, they said that their probability of getting a job was relatively low. However, their desire for work seemed to be quite high--that is, their incentive to work was relatively high and their incentive to avoid work was relatively low.

Further Theoretical Questions

We may say that the motive, expectancy, and incentive measures that we have developed with reference to work do seem to explore the characteristics in which we are interested when compared to the behavioral outcomes shown with reference to the variables present employment status and MDTA status. They do appear to shed light on the motivational factors that are reflected in the activities of individuals within the various status categories studied. The relationships found were clearly more predictable from our motivational theory when the various motivation to work scales were related to present employment status as compared to when MDTA status was the dependent variable. This should not be too surprising for two reasons. First, the theoretically based measures were designed to reflect aspects of motivation to work and, as such, should be more closely related to work status rather than training status. Second, since four of the six motivational component

measures are theoretically quite highly influenced by the immediate situation, it is not surprising that they are more related to present employment status rather than past MDTA status. However, we cannot overlook the possibility that a number of the measures may have different degrees of validity or possibly that one or another of the scales is of questionable validity. The data reported herein with reference to employment status do support most of the predictions based on the theoretical formulation of work motivation. The data relating these measures to MDTA status is less supportive but possibly this is because it is less relevant as was pointed out above. It seems that, by and large, the adequacy of these scales has been demonstrated and their usefulness indicated.

Remembering our initial theoretical formulation, we need to put all of these six scales together in order to develop a more adequate prediction with reference to employment status. In other words, the conceptualization of motive (X) expectancy (X) incentive to work (-) the motive to avoid work (X) the expectancy to avoid work (X) the incentive to avoid work should give us a residual behavior potential that, in conjunction with ability measures, interest measures, and knowledge of the opportunity of the individuals to be exposed to work should enable a prediction of whether these individuals would or would not get work. This complex theoretical speculation requires further detailed analysis because up to now we have been concerned mainly with demonstrating the appropriateness of each of these six measures and the adequacy of the scales as measures of the six motivational factors.

We may now turn to other significant questions: How does each of these six scales relate to each other? What is the interrelationship among these six motivational measures? Table 14 contains evidence of the degree of their interrelationship. As might be expected, the motive to work scale shows a significant negative correlation with the motive to avoid work scale. This negative correlation (r= -.415) between these two measures does not mean that they are different sides of the same coin. This is not unlike the relationship found by Raphelson* who noted that the thematic apperceptive need achievement scores (motive to achieve) obtained under achievement-oriented conditions correlated r= -.43 with test anxiety scores (fear of failure) on the same subjects. If they were two sides of the same coin, the correlation would be much larger. There is, however, a relationship between the positive side of one concept and the negative side of the other. Expectancy to work and expectancy to avoid work are similarly related (r= -.364). That is, there is a significant negative correlation between these two measures, but again, they are not two sides of the same coin.

Interestingly enough, the incentive to work measure and the incentive to avoid work measure are not related. In fact, there appears to be no correlation of any significance between the two.

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*Raphelson, A. C., "The Relationships Between Imaginative, Direct, Verbal, and Physiological Measures of Anxiety in an Achievement Situation." Journal of Abnormal Social Psychology, LX (1957), pp. 8-13.

TABLE 14

INTERCORRELATION OF MOTIVATIONAL MEASURES
(Interview Sample Completed)

N= 494

	EWT	IWT	MAWT	EAWT	LAWT
Motivation to Work Total	+.245	-.035	-.415	+.055	-.194
Expectancy to Work Total		-.074	-.063	-.364	-.049
Incentive to Work Total			+.076	+.108	+.052
Motivation to Avoid Work Total				+.036	+.408
Expectancy to Avoid Work Total					+.157
Incentive to Avoid Work Total					

Degrees of freedom = 490; r .05 = .074; r .01 = .105
(single underlined) (double underlined)

Why this is the case is not as yet clear. Another statistically signnificant correlation is between the measure of motivation to avoid work and the measure of incentive to avoid work. This correlation is positive and highly significant, indicating that a high score on motivation to avoid work is associated with a high score on incentive to avoid work. This is not especially surprising considering the population under study. There is, however, a comparable correlation between the motive to work and the incentive to work. There is essentially no correlation of any significance shown between these latter two measures. The reason for this finding is not clear; however, a significant positive correlation between motive to work and expectancy to work is shown, as might be expected. On the other hand, there is no significant correlation between motive to avoid work and expectancy to avoid work. Atkinson* would expect a significant negative relationship between incentive to work and expectation to work. Our finding of a statistically significant negative relationship supports this expectation, but the size of the correlation is small. The other correlations shown in this table were not sufficiently large to require any degree of explanation. They are generally low and not statistically significant.

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*Atkinson, J. W., Introduction to Motivation (Princeton: D. Van Nostrand, 1964), p. 242.

Results With Reference to Behavior - Potential to Work

We may now turn to the exploration of the relational meaning of our behavior-potential to work measure. (Operationally, it is the residual product of the six motivational measures in standard score form.)

One might expect a priori that this scale measure should be generally higher for males than for females. The data indicate that this is the case. The Chi square statistic (Chi square = 27.73, df = 8, $p < .001$) and the correlation coefficient ($r = .20$, $p < .05$) both indicate that males are significantly higher than females on this score for the population studied. This finding is to be expected since the cultural expectations are differentially developed in men and women in our society.

On the other hand, there is probably no reason to expect any difference in this measure associated with race in this sample. It is not surprising, then, that we find no significant difference (Chi square = 10.44, df = 16) in the behavior-potential to work measure associated with race. This finding, however, may be peculiar to the population studied. In other words, whites and nonwhites listed with the Employment Service at a given period in time may be more alike in motivation to work than are all members of both racial groups in the population of the area as a whole.

On an a priori basis, one might expect that the behavior-potential to work measure would be associated with whether an individual is living rent free with relatives, paying rent, or buying a house, or

had bought it outright. Certainly there is less economic pressure on individuals in the first and fourth categories than on the individuals in the second and third categories. However, these categories do not seem to be associated with any particularly significant differences (Chi square = 21.79, df = 16) in the behavior-potential to work within our sample.

On the other hand, one would expect the measure to be positively associated with the number of dependents. And here, there is a small but statistically significant correlational association ($r = .10$, $p < .05$), the more dependents the higher the behavior-potential to work--which is in line with our expectations.

Again, the nature of the sample studied probably influences results when educational levels are viewed against motivation to work. Since individuals with higher levels of education generally have access to more job information and opportunity, it is likely that those relatively high in level of education who fell into the sample were not highly motivated individuals. With that assumption in mind, we would expect that the behavior-potential to work might be negatively associated with average level of education. There is in fact a small but statistically significant correlation ($r = -.12$, $p < .05$) supporting this tendency.

One would certainly expect that the behavior-potential to work measure would be related to the number of months worked during the prior four-and-one-half-year period. Again, one would not expect this

relationship to be extremely high since the motivational measures here considered is only one component of the total predictive picture. Again, the findings support this expectation, showing a small but statistically significant correlation ($r = .145$, $p < .05$). One would also expect that there would be a negative relationship between the behavior-potential to work and the number of months unemployed during the same period. A negative relationship ($r = -.05$) does appear but is not large enough to be statistically significant. On the other hand, the relationship between the behavior-potential to work measure and the number of months out of the labor force during the period, which also would be expected to be negative, is both negative and statistically significant ($r = -.13$, $p < .05$). The relationship is not large, but the statistics indicate that it does not occur through mere chance.

We might also expect that the behavior-potential to work measure should be associated with present employment status--that is individuals who are presently employed should be higher in behavior potential to work than individuals who are presently unemployed, who should be, in turn, higher than individuals who are presently not in the labor force. The distributions found showed this kind of tendency, though differences were not statistically significant (Chi square = 12.02, df = 16).

The characteristics reviewed above are those which common sense suggests should have some relation to motivation to work, and findings, by and large, corroborated this supposition. However, the

study also yielded information on characteristics for which logic would suggest no connection with motivation to work (the residual behavior potential).

One such characteristic was age. The study sample consisted generally of persons over 22 years of age who were listed with the Employment Service. There was no reason to expect the measures of behavior-potential to work to be associated in any particular direction with age. No statistically significant relationship ($r = .07$, p = not significant) was, in fact, found although a positive trend was suggested--that is, the behavior-potential to work measure seemed to be, on the average, slightly higher for older age groups and somewhat lower for younger age groups.

As one would expect, also, no particular relationship was found between the behavior-potential to work measure and the nature of the individual's expectations about his future, whether realistic or unrealistic, optimistic or pessimistic; nor was there any particular relationship between this motivational measure and his ability to communicate as evaluated by our interviewers. Finally, there was no statistically significant relationship between the behavior-potential to work and whether or not an individual had or did not have plans for the future.

Summary

In summary, indications are that the behavior-potential to work measure does show statistically significant relationships, though of

small size, with those variables which common sense suggests are related to motivation to work. Moreover, positive and negative relationships run in the expected direction. Other variables, as anticipated, showed no relationship to the motivational measure. However, it should be noted that none of the relationships were of especially large size, though in many cases they were statistically significant.

Some interesting scale measurements have been developed and some interesting and important data are found herein. Many promising possibilities exist. Hopefully, using these scales, some systematic progress may be made in measuring these dimensions and in using this information for appropriate selection or guidance situations. It is even possible that one may measure the impact of various training courses or events on an individual's motivation to work. Future steps in this direction seem now to be in the realm of possibility.

Finally, our findings also may be interpreted as follows: It is possible that the motivational characteristics that facilitate employment of an individual are not necessarily the motivational characteristics that facilitate success in training. As an example, a person who is highly motivated to work may not be inclined to take training but more inclined to look for and obtain a job. Conversely, a person who is motivated to avoid work might take training as a method of avoiding work and still obtaining an income. This does not mean that <u>all</u> persons who get work without training are high on motive to work or that the converse is true in all cases. There are many variables operating in this kind of situation and they must be sorted out in each case.

APPENDIX A

TECHNIQUES OF MEASUREMENT

APPENDIX A

TECHNIQUES OF MEASUREMENT*

The purpose of this appendix is to elaborate the techniques by which measures of the six motivational dimensions were developed.

In a preliminary study the items on 15 individuals from the Service office of the Employment Service were pretested. Data from 92 heterogeneous individuals, all of whom were employed at the time, were collected. These 92 individuals were working at jobs ranging in occupational content from relatively routine, low level jobs to first-level management jobs. The detailed analysis is based, however, on the 500 persons interviewed in the present study. Each of the persons involved was asked to respond to a series of questions which presented a number of items conceptually relevant to the specific concept. Presented on the following pages are the six motivational concepts initially operationalized.

Motive to Work

We conceive of the motive to work as being the strength of the want or need that impels an individual toward a goal or class of goals implicit in work. They are operationally defined by a series of Likert

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*Mr. Donald Noone contributed greatly to the work described in this appendix.

type items. The items listed below explore the various facets of the concept of motive to work and their relative strength. With reference to each item a score of 5 indicates high motive to work, and a score of 1 indicates a low motive to work. An individual's score on this scale is the sum of his scores on each of the items in this scale.

Motive to Work

	AGREE			DISAGREE	
	Strongly	Mildly	Undec.	Mildly	Strongly
1. I think that one of the important things about working is that it gives me something to do all day.	5	4	3	2	1
2. I found that I was able to make friends on my job.	5	4	3	2	1
3. I think that working makes me feel that I am somebody important.	5	4	3	2	1
4. I think that neighbors, family, friends, and other people think more of me when I hold down a steady job.	5	4	3	2	1
5. While I am working I cannot do what I want. This bothers me.	1	2	3	4	5
6. I work because of the money.	5	4	3	2	1
7. It makes me feel real good after a hard day's work.	5	4	3	2	1
8. After a hard day's work, I usually feel "beat."	1	2	3	4	5

Motive to Avoid Work

Conversely, we can think conceptually of the motive to avoid work as the strength of the tendency to prefer nonwork environments. The items listed below describe the various facets of this concept using Likert-type scales to measure the relative strength of motive to avoid work. With reference to each item a score of 5 indicates a high motive to avoid work, and a score of 1 indicates a low motive to avoid work. An individual's score on this scale is the sum of his scores on each of the items in the scale.

Motive to Avoid Work

	AGREE			DISAGREE	
	Strongly	Mildly	Undec.	Mildly	Strongly
1. If by some chance somebody left me enough money to live comfortably without working, I think I would not work.	5	4	3	2	1
2. If I didn't work all day I would be free to do whatever I felt like doing. I would like this.	5	4	3	2	1
3. If I didn't work, I think I would have enough friends and meet with enough other people.	5	4	3	2	1
4. If I didn't work, I think people would think less of me.	1	2	3	4	5
5. When I am unemployed I feel ashamed.	1	2	3	4	5

	AGREE Strongly	AGREE Mildly	Undec.	DISAGREE Mildly	DISAGREE Strongly
6. If i did not work, I think I would be fed up.	1	2	3	4	5
7. After a hard day's work I usually feel "beat."	5	4	3	2	1

Expectancy to Work

We conceive expectancy to work as the probability of actually attaining the goals sought in working. It is operationally defined by the series of items listed below. A score of 5 on an item indicates high expectancy to work and a score of 1 indicates a low expectancy to work. An individual's score on this scale is the sum of his scores on each of the items in the scale. (If the respondent is presently employed, have him answer as if he were unemployed.)

	AGREE Strongly	AGREE Mildly	Undec.	DISAGREE Mildly	DISAGREE Strongly
1. It bothers me if a large number of unemployed people are looking for the same type of work I can do.	1	2	3	4	5
2. I have had such a good work record in the past that it will surely help me to get work again.	5	4	3	2	1
3. Even if I were unemployed often, it wouldn't be held against me when I am applying for a job.	5	4	3	2	1
4. Since I'll take any decent job, my chances of getting work are good.	5	4	3	2	1

	AGREE			DISAGREE	
	Strongly	Mildly	Undec.	Mildly	Strongly
5. If people only knew what I could really do, I would probably be hired on the spot.	5	4	3	2	1
6. I think there are many employers who would hire me.	5	4	3	2	1
7. My color or nationality will be held against me, in my efforts to find work.	1	2	3	4	5
8. If I try hard enough, I will find a job.	5	4	3	2	1
9. I think there are a lot of people who are really going to help me find work.	5	4	3	2	1
10. My chances of getting a job are good.	5	4	3	2	1
11. I think most unions would accept me as a member regardless of race or nationality.	5	4	3	2	1

Expectancy to Avoid Work

The expectancy to avoid work is defined as the probability of actually avoiding work situations. The strength of the measures and their conceptual coverage are determined by the operational definitions listed below using a Likert-type of item weighted as follows. A score of 5 on an item indicates a high expectancy to avoid work, and a 1 indicates a low expectancy to avoid work. An individual's score on this scale is the sum of his scores on each of the items in this scale.

(If the respondent is presently employed, have him answer as if he were unemployed.)

	AGREE			DISAGREE	
	Strongly	Mildly	Undec.	Mildly	Strongly
1. With so many out of work and so few jobs around, it will be tough for me to find work.	5	4	3	2	1
2. The number of jobs I have had in the past will hurt my chances of getting work.	5	4	3	2	1
3. I have been out of work so often in the past that my chances of getting work again are small.	5	4	3	2	1
4. The jobs they offer you nowadays are few and far between.	5	4	3	2	1
5. Even if there were jobs around, I don't think an employer would hire me anyway.	5	4	3	2	1
6. I am the kind of guy who is "the last to be hired and the first to be fired."	5	4	3	2	1
7. My color hurts my chances of getting work.	5	4	3	2	1
8. I don't think I can find a job by myself.	5	4	3	2	1
9. These employment agencies are no good; they never find anybody a job.	5	4	3	2	1
10. The odds are that I won't get work.	5	4	3	2	1

Incentive to Work

The incentive to work measure is defined as the value or valence of the goals attached to working that would specifically induce an individual to work. The incentive to work is operationally defined by the items listed below. The items in this scale differ from those in the motive to work scale in that a specific incentive, e.g., money, working conditions, etc., is presented for a respondent's consideration, but this incentive is laid out in gradations. Here the respondent is asked to choose the value of an incentive that would induce him to work. A high score (3) on an item in this scale indicates high incentive to work, and a low score (0) on this scale indicates low incentive to work. An individual's score on this scale is the sum of his scores on each of the items in the scale.

(If the respondent is presently employed have him answer as if he were unemployed.)

1. In order to get to my job, I would be willing to travel at most (check one)

   _3_ a. an hour or more

   _2_ b. between ½ hour and an hour

   _1_ c. a half hour or less

   _0_ d. I would rather not work

2. The pay that I would be willing to take (check one)

   _1_ a. would have to be higher than my last job

   _2_ b. would have to be about the same as my last job

   _3_ c. could be lower than my last job

   _0_ d. I would rather not work

3. I would be willing to work (check one)

_3_ a. with a boss on top of me all the time

_2_ b. with a boss on top of me some of the time

_1_ c. only where I was on my own most of the time

_0_ d. I would rather not work

4. I would be willing to work (check one)

_1_ a. only in my own line of work

_2_ b. in some new line of work that is similar to my usual work

_3_ c. at almost anything

_0_ d. I would rather not work

5. I would be willing to take a job (check one)

_1_ a. only that will be steady from now on

_2_ b. which is good for now even though it is possible I might get laid off in the distant future

_3_ c. even if there was a chance I might get laid off soon

_0_ d. I would rather not work

6. I would be willing to take a job (check one)

_1_ a. only if it was exciting

_3_ b. that meant doing the same thing over and over again

_2_ c. that was sometimes interesting and at other times real dead

_0_ d. I would rather not work

7. I would be willing to take a job (check one)

_2_ a. if I have to take training in a good, new field

_3_ b. if I have to take training in any field

_1_ c. if I have to take training in my own field

_0_ d. I would rather not work

relationship to be extremely high since the motivational measures here considered is only one component of the total predictive picture. Again, the findings support this expectation, showing a small but statistically significant correlation ($r = .145$, $p < .05$). One would also expect that there would be a negative relationship between the behavior-potential to work and the number of months unemployed during the same period. A negative relationship ($r = -.05$) does appear but is not large enough to be statistically significant. On the other hand, the relationship between the behavior-potential to work measure and the number of months out of the labor force during the period, which also would be expected to be negative, is both negative and statistically significant ($r = -.13$, $p < .05$). The relationship is not large, but the statistics indicate that it does not occur through mere chance.

We might also expect that the behavior-potential to work measure should be associated with present employment status--that is individuals who are presently employed should be higher in behavior potential to work than individuals who are presently unemployed, who should be, in turn, higher than individuals who are presently not in the labor force. The distributions found showed this kind of tendency, though differences were not statistically significant (Chi square = 12.02, df = 16).

The characteristics reviewed above are those which common sense suggests should have some relation to motivation to work, and findings, by and large, corroborated this supposition. However, the

study also yielded information on characteristics for which logic would suggest no connection with motivation to work (the residual behavior potential).

One such characteristic was age. The study sample consisted generally of persons over 22 years of age who were listed with the Employment Service. There was no reason to expect the measures of behavior-potential to work to be associated in any particular direction with age. No statistically significant relationship ($r = .07$, p = not significant) was, in fact, found although a positive trend was suggested--that is, the behavior-potential to work measure seemed to be, on the average, slightly higher for older age groups and somewhat lower for younger age groups.

As one would expect, also, no particular relationship was found between the behavior-potential to work measure and the nature of the individual's expectations about his future, whether realistic or unrealistic, optimistic or pessimistic; nor was there any particular relationship between this motivational measure and his ability to communicate as evaluated by our interviewers. Finally, there was no statistically significant relationship between the behavior-potential to work and whether or not an individual had or did not have plans for the future.

Summary

In summary, indications are that the behavior-potential to work measure does show statistically significant relationships, though of

small size, with those variables which common sense suggests are related to motivation to work. Moreover, positive and negative relationships run in the expected direction. Other variables, as anticipated, showed no relationship to the motivational measure. However, it should be noted that none of the relationships were of especially large size, though in many cases they were statistically significant.

Some interesting scale measurements have been developed and some interesting and important data are found herein. Many promising possibilities exist. Hopefully, using these scales, some systematic progress may be made in measuring these dimensions and in using this information for appropriate selection or guidance situations. It is even possible that one may measure the impact of various training courses or events on an individual's motivation to work. Future steps in this direction seem now to be in the realm of possibility.

Finally, our findings also may be interpreted as follows: It is possible that the motivational characteristics that facilitate employment of an individual are not necessarily the motivational characteristics that facilitate success in training. As an example, a person who is highly motivated to work may not be inclined to take training but more inclined to look for and obtain a job. Conversely, a person who is motivated to avoid work might take training as a method of avoiding work and still obtaining an income. This does not mean that <u>all</u> persons who get work without training are high on motive to work or that the converse is true in all cases. There are many variables operating in this kind of situation and they must be sorted out in each case.

APPENDIX A

TECHNIQUES OF MEASUREMENT

APPENDIX A

TECHNIQUES OF MEASUREMENT*

The purpose of this appendix is to elaborate the techniques by which measures of the six motivational dimensions were developed.

In a preliminary study the items on 15 individuals from the Service office of the Employment Service were pretested. Data from 92 heterogeneous individuals, all of whom were employed at the time, were collected. These 92 individuals were working at jobs ranging in occupational content from relatively routine, low level jobs to first-level management jobs. The detailed analysis is based, however, on the 500 persons interviewed in the present study. Each of the persons involved was asked to respond to a series of questions which presented a number of items conceptually relevant to the specific concept. Presented on the following pages are the six motivational concepts initially operationalized.

Motive to Work

We conceive of the motive to work as being the strength of the want or need that impels an individual toward a goal or class of goals implicit in work. They are operationally defined by a series of Likert

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*Mr. Donald Noone contributed greatly to the work described in this appendix.

type items. The items listed below explore the various facets of the concept of motive to work and their relative strength. With reference to each item a score of 5 indicates high motive to work, and a score of 1 indicates a low motive to work. An individual's score on this scale is the sum of his scores on each of the items in this scale.

Motive to Work

	AGREE			DISAGREE	
	Strongly	Mildly	Undec.	Mildly	Strongly
1. I think that one of the important things about working is that it gives me something to do all day.	5	4	3	2	1
2. I found that I was able to make friends on my job.	5	4	3	2	1
3. I think that working makes me feel that I am somebody important.	5	4	3	2	1
4. I think that neighbors, family, friends, and other people think more of me when I hold down a steady job.	5	4	3	2	1
5. While I am working I cannot do what I want. This bothers me.	1	2	3	4	5
6. I work because of the money.	5	4	3	2	1
7. It makes me feel real good after a hard day's work.	5	4	3	2	1
8. After a hard day's work, I usually feel "beat."	1	2	3	4	5

Motive to Avoid Work

Conversely, we can think conceptually of the motive to avoid work as the strength of the tendency to prefer nonwork environments. The items listed below describe the various facets of this concept using Likert-type scales to measure the relative strength of motive to avoid work. With reference to each item a score of 5 indicates a high motive to avoid work, and a score of 1 indicates a low motive to avoid work. An individual's score on this scale is the sum of his scores on each of the items in the scale.

Motive to Avoid Work

	AGREE			DISAGREE	
	Strongly	Mildly	Undec.	Mildly	Strongly
1. If by some chance somebody left me enough money to live comfortably without working, I think I would not work.	5	4	3	2	1
2. If I didn't work all day I would be free to do whatever I felt like doing. I would like this.	5	4	3	2	1
3. If I didn't work, I think I would have enough friends and meet with enough other people.	5	4	3	2	1
4. If I didn't work, I think people would think less of me.	1	2	3	4	5
5. When I am unemployed I feel ashamed.	1	2	3	4	5

	AGREE			DISAGREE	
	Strongly	Mildly	Undec.	Mildly	Strongly
6. If i did not work, I think I would be fed up.	1	2	3	4	5
7. After a hard day's work I usually feel "beat."	5	4	3	2	1

Expectancy to Work

We conceive expectancy to work as the probability of actually attaining the goals sought in working. It is operationally defined by the series of items listed below. A score of 5 on an item indicates high expectancy to work and a score of 1 indicates a low expectancy to work. An individual's score on this scale is the sum of his scores on each of the items in the scale. (If the respondent is presently employed, have him answer as if he were unemployed.)

	AGREE			DISAGREE	
	Strongly	Mildly	Undec.	Mildly	Strongly
1. It bothers me if a large number of unemployed people are looking for the same type of work I can do.	1	2	3	4	5
2. I have had such a good work record in the past that it will surely help me to get work again.	5	4	3	2	1
3. Even if I were unemployed often, it wouldn't be held against me when I am applying for a job.	5	4	3	2	1
4. Since I'll take any decent job, my chances of getting work are good.	5	4	3	2	1

	AGREE			DISAGREE	
	Strongly	Mildly	Undec.	Mildly	Strongly
5. If people only knew what I could really do, I would probably be hired on the spot.	5	4	3	2	1
6. I think there are many employers who would hire me.	5	4	3	2	1
7. My color or nationality will be held against me, in my efforts to find work.	1	2	3	4	5
8. If I try hard enough, I will find a job.	5	4	3	2	1
9. I think there are a lot of people who are really going to help me find work.	5	4	3	2	1
10. My chances of getting a job are good.	5	4	3	2	1
11. I think most unions would accept me as a member regardless of race or nationality.	5	4	3	2	1

Expectancy to Avoid Work

The expectancy to avoid work is defined as the probability of actually avoiding work situations. The strength of the measures and their conceptual coverage are determined by the operational definitions listed below using a Likert-type of item weighted as follows. A score of 5 on an item indicates a high expectancy to avoid work, and a 1 indicates a low expectancy to avoid work. An individual's score on this scale is the sum of his scores on each of the items in this scale.

(If the respondent is presently employed, have him answer as if he were unemployed.)

	AGREE			DISAGREE	
	Strongly	Mildly	Undec.	Mildly	Strongly
1. With so many out of work and so few jobs around, it will be tough for me to find work.	5	4	3	2	1
2. The number of jobs I have had in the past will hurt my chances of getting work.	5	4	3	2	1
3. I have been out of work so often in the past that my chances of getting work again are small.	5	4	3	2	1
4. The jobs they offer you nowadays are few and far between.	5	4	3	2	1
5. Even if there were jobs around, I don't think an employer would hire me anyway.	5	4	3	2	1
6. I am the kind of guy who is "the last to be hired and the first to be fired."	5	4	3	2	1
7. My color hurts my chances of getting work.	5	4	3	2	1
8. I don't think I can find a job by myself.	5	4	3	2	1
9. These employment agencies are no good; they never find anybody a job.	5	4	3	2	1
10. The odds are that I won't get work.	5	4	3	2	1

Incentive to Work

The incentive to work measure is defined as the value or valence of the goals attached to working that would specifically induce an individual to work. The incentive to work is operationally defined by the items listed below. The items in this scale differ from those in the motive to work scale in that a specific incentive, e.g., money, working conditions, etc., is presented for a respondent's consideration, but this incentive is laid out in gradations. Here the respondent is asked to choose the value of an incentive that would induce him to work. A high score (3) on an item in this scale indicates high incentive to work, and a low score (0) on this scale indicates low incentive to work. An individual's score on this scale is the sum of his scores on each of the items in the scale.

(If the respondent is presently employed have him answer as if he were unemployed.)

* 1. In order to get to my job, I would be willing to travel at most (check one)

_3_ a. an hour or more

_2_ b. between ½ hour and an hour

_1_ c. a half hour or less

_0_ d. I would rather not work

2. The pay that I would be willing to take (check one)

_1_ a. would have to be higher than my last job

_2_ b. would have to be about the same as my last job

_3_ c. could be lower than my last job

_0_ d. I would rather not work

3. I would be willing to work (check one)

_3_ a. with a boss on top of me all the time

_2_ b. with a boss on top of me some of the time

_1_ c. only where I was on my own most of the time

_0_ d. I would rather not work

4. I would be willing to work (check one)

_1_ a. only in my own line of work

_2_ b. in some new line of work that is similar to my usual work

_3_ c. at almost anything

_0_ d. I would rather not work

5. I would be willing to take a job (check one)

_1_ a. only that will be steady from now on

_2_ b. which is good for now even though it is possible I might get laid off in the distant future

_3_ c. even if there was a chance I might get laid off soon

_0_ d. I would rather not work

6. I would be willing to take a job (check one)

_1_ a. only if it was exciting

_3_ b. that meant doing the same thing over and over again

_2_ c. that was sometimes interesting and at other times real dead

_0_ d. I would rather not work

7. I would be willing to take a job (check one)

_2_ a. if I have to take training in a good, new field

_3_ b. if I have to take training in any field

_1_ c. if I have to take training in my own field

_0_ d. I would rather not work

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Incentive to Avoid Work

The incentive to avoid work is defined as the value of avoiding work situations; i.e., a preference for specific alternatives to work. A high score (3) reflects a preference for these nonwork alternatives, while a low score (0) endorses alternative preferences for work. The items listed below fit conceptually into this category. An individual's score on this scale is the sum of his scores on each of the items in this scale. (If the respondent is presently employed, have him answer as if he were unemployed.)

1. I would just as soon not work (check one)

   3 a. if I had enough money for the bare necessities of life

   2 b. if I had enough money to make ends meet

   1 c. if I had enough money to live nicely

   0 d. I would rather work

2. If I had enough money to meet my needs without working, I would (check one)

   2 a. do what I want to do most of the time

   3 b. do what I want to do some of the time

   1 c. not have anybody tell me what to do anymore

   0 d. I would rather work

3. If I had enough money to meet my needs without work, I would (check one)

   1 a. be with my friends all the time

   2 b. be with my friends some of the time

   3 c. be on my own all the time

   0 d. I would rather work

4. If I had enough money to meet my needs without working, I would (check one)

   _3_ a. just take it easy all the time

   _2_ b. just take it easy some of the time

   _1_ c. I would rather work part-time

   _0_ d. I would rather work full-time

5. If I had enough money to meet my needs without working, I would (check one)

   _1_ a. learn about new things most of the time

   _2_ b. learn about new things some of the time

   _3_ c. not clutter my mind with new things

   _0_ d. I would rather work

6. If I had enough money to meet my needs without working, I would (check one)

   _3_ a. spend more time watching T.V. and sporting events

   _2_ b. spend more time with my family doing things

   _1_ c. volunteer my services to some worthy organization

   _0_ d. I would rather work

High scores on each of these six dimensions reflect more of the characteristic specified; conversely, low scores reflect less of the specified characteristic. The following tables develop the evidence necessary to demonstrate the basis for accepting the items in these scales as actual measures of the dimensions in question.

Basic to these notions are the six concepts involved that generated the items used as initial measures. We required each item to fit conceptually with the concept for which it was used. Second, in both the

preliminary study (an earlier study of employed persons, N=92), and the second study (our present interview sample, N=500), each item within a scale had to show a generally positive intercorrelation with items in its own scale and a lack of correlation with items in the other five scales. Finally, and most importantly, each item in the scale had to show a significant positive correlation with the total scale score. This was obtained by summing the item scores for each particular scale.

Of course, this process entailed the deleting of some items from the original scales. Presented below (Table A.1) are data for the items within each scale meeting the aforementioned criteria.

TABLE A.1: MOTIVE TO WORK
(Interview Sample Completed)

	MW2	MW3	MW4	MW6	MW7	MW Total	Ave.* Within Scale "r"	Avg.** "r" with Motivational Items Not Within This Scale
MW 1	+.21	+.45	+.32	+.06	+.25	+.72	.35	-.13
MW 2		+.26	+.10	-.16	+.05	+.37	.20	-.09
MW 3			+.42	-.01	+.28	+.73	.40	-.05
MW 4				+.05	+.20	+.66	.31	-.05
MW 6					+.17	+.32	.13	+.14
MW 7						+.61	.27	+.07
MW Total							.59	-.03

*The average r between each item and each other item within the scale (including the item-total scale score) was obtained using the z coefficients as noted in Fisher and Yates, p. 54.

**The average r between each particular item in the scale and all items in the other five motivational scales was obtained using the z coefficients as noted in Fisher and Yates, p. 54.

Degrees of freedom = 490; r.05 = .074; (single underlined) r.01 = .105 (double underlined)

The requisite information concerning the measure of motive to work is demonstrated in the first table. Note the elimination of the original items MW5 and MW8. MW5 and MW8 were eliminated because these items showed neither sufficiently large item-total correlation, nor a generally positive inter-item correlation with items within their scale. A second set of requirements not met by these items was a generally higher average correlation with items within the scale as contrasted to their average correlation with motivational items not within its scale. One minor exception is item MW6. This item showed about the same level of correlation with items in its scale as with items in the other motivational scales. It is particularly clear that the total scale score is the most useful and reliable measure to be used for this concept.

It may seem questionable that item MW6 fulfills our requirements. Note, however, that the item-total correlation shows a significantly positive, though relatively low, correlation coefficient when compared to other measures of the motive to work.

With reference to expectancy to work, we note in Table A.2 that the item-total correlations are all strong and positive, and that the majority of the inter-item correlations are sufficiently strong and positive. However, they were of a lower order, of course, than the item-total correlations. Furthermore, it can be seen that the average within scale intercorrelation is higher than the average correlations of these items with the other motivational items not within this scale. This is true of all items except EW1, which has been deleted. Above

TABLE A.2: EXPECTANCY TO WORK

(Interview Sample Completed)

	EW3	EW4	EW5	EW6	EW7	EW8	EW9	EW10	EW11	EW Total	Avg.* Within Scale "r"	Avg.** "r" With Motivational Items Not Within This Scale
EW 2	+.18	+.33	+.32	+.27	+.04	+.09	+.12	+.28	+.11	+.56	.24	+.07
EW 3		+.20	+.21	+.15	+.01	+.06	+.21	+.12	+.01	+.44	.16	+.04
EW 4			+.26	+.39	+.03	+.17	+.23	+.33	+.07	+.61	.27	-.02
EW 5				+.37	+.03	+.12	+.14	+.19	+.09	+.53	.24	-.01
EW 6					+.10	+.28	+.22	+.39	+.16	+.66	.31	-.04
EW 7						+.27	+.20	+.23	+.34	+.35	.17	+.02
EW 8							+.43	+.60	+.34	+.53	.30	+.06
EW 9								+.52	+.25	+.57	.30	+.08
EW 10									+.42	+.70	.40	+.04
EW 11										+.44	.23	+.05
EW Total											.54	-.08

*The average r between each item and each other item within the scale (including the item-total scale score) was obtained using the z coefficients as noted in Fisher and Yates, p. 54.

**The average r between each particular item in the scale and all items in the other five motivational scales was obtained using the z coefficients as noted in Fisher and Yates, p. 54.

Degrees of freedom = 490; $r_{.05} = .074$ (single underlined); $r_{.01} = .105$ (double underlined)

findings would tend to indicate that our measure of expectancy to work is reasonably reliable and independent of the other five motivational measures.

The incentive to work measure can be analyzed through looking at Table A.3. Here we notice again that item-total correlations are sufficiently large, which indicates that we are on reasonably safe ground. However, we do find some lack of inter-item correlation for the items in this scale, but the stronger indication is that item-total correlations are sufficiently large, positive, and statistically significant. Additionally, the average within-scale correlation is also larger than the average correlations of these scale items with other motivational items not within this scale. This is especially true of items 5, 6, and 7 of this scale.

Turning now to the motive to avoid work we find that the item-total correlations are quite strong and positive and also there are significant inter-item correlations between each of the items (Table A.4). It is also true that the average inter-item correlations of items in this scale are higher than their comparable inter-item correlations between items within this scale and items of the other five motivational scales, again indicating some independence of this parti ular scale dimension. Item MAW 7 has been deleted because it did not fulfill these requirements.

The data for the expectancy to avoid work scale are also positive. That is, the item-total correlations are strong and positive, and the inter-item correlations are basically somewhat less strong, but also, positive (Table A.5). Furthermore, we note that the average inter-item

TABLE A.3: INCENTIVE TO WORK

(Interview Sample Completed)

	IW2	IW3	IW4	IW5	IW6	IW7	IW Total	Avg.* Within Scale "r"	Avg.** "r" With Motivational Items Not Within This Scale
IW 1	+.03	+.08	+.18	-.13	-.12	-.08	+.37	+.15	-.03
IW 2		+.11	+.19	+.18	+.03	-.04	+.58	+.18	-.03
IW 3			+.15	-.09	+.02	-.03	+.41	+.13	-.02
IW 4				-.10	-.12	+.10	+.58	+.22	-.01
IW 5					+.64	+.54	+.54	+.34	+.16
IW 6						+.55	+.47	+.30	+.17
IW 7							+.52	+.28	+.14
IW Total								+.50	+.01

*The average r between each item and each other item within the scale (including the item-total scale score) was obtained using the z coefficients as noted in Fisher and Yates, p. 54.

**The average r between each particular item in the scale and all items in the other five motivational scales was obtained using the z coefficients as noted in Fisher and Yates, p. 54.

Degrees of freedom = 490; $r_{.05}$ = .074; (single underlined) $r_{.01}$ = .105 (double underlined)

TABLE A.4: MOTIVE TO AVOID WORK

(Interview Sample Completed)

	MAW2	MAW3	MAW4	MAW5	MAW6	MAW Total	Scale "r"	Avg.** "r" With Motivational Items Not Within This Scale
MAW 1	+.51	+.18	+.17	+.16	+.20	+.56	+.31	+.07
MAW 2		+.31	+.08	+.13	+.20	+.54	+.31	+.06
MAW 3			+.08	+.15	+.14	+.46	+.23	+.04
MAW 4				+.54	+.46	+.69	+.36	-.03
MAW 5					+.63	+.72	+.42	+.05
MAW 6						+.72	+.43	+.07
MAW Total							+.63	+.01

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*The average r between each item and each other item within the scale (including the item-total scale score) was obtained using the z coefficients as noted in Fisher and Yates, p. 54.

**The average r between each particular item in the scale and all items in the other five motivational scales was obtained using the z coefficients as noted in Fisher and Yates, p. 54.

Degrees of freedom = 490; r.05 = .074; (single underlined) r.01 = .105 (double underlined)

correlation within this scale is higher than the inter-item correlations between items within this scale and items of a motivational nature developed from the other five scales.

Using the same kind of criteria it is clear that the identical characteristics hold for our measure of incentive to avoid work. Thus, the item-total correlations are significant, positive and large, and the inter-item correlations are positive and significant at the $P<.01$ level in all cases. Therefore, we find that the average inter-item correlations are positive and strong and even stronger than the average inter-item correlations between items on this scale and items from the other five motivational scales (Table A.6).

TABLE A.5: EXPECTANCY TO AVOID WORK

(Interview Sample Completed)

	EAW2	EAW2	EAW4	EAW5	EAW6	EAW7	EAW8	EAW9	EAW10	EAW Total	Avg.* Within Scale "r"	Avg.** "r" With Motivational Items not Within This Scale
EAW 1	+.25	+.28	+.50	+.28	+.12	+.13	+.22	+.05	+.18	+.61	.27	+.01
EAW 2		+.60	+.23	+.34	+.21	+.25	+.20	-.02	+.23	+.57	.30	+.02
EAW 3			+.21	+.37	+.32	+.21	+.30	+.04	+.31	+.63	.34	+.01
EAW 4				+.24	+.16	+.20	+.16	+.16	+.16	+.61	.27	+.01
EAW 5					+.40	+.35	+.41	+.28	+.47	+.68	.39	+.00
EAW 6						+.51	+.62	+.51	+.63	+.58	.42	+.12
EAW 7							+.45	+.35	+.48	+.52	.35	+.05
EAW 8								+.46	+.64	+.60	.42	+.09
EAW 9									+.55	+.36	.28	+.09
EAW 10										+.63	.45	+.09
EAW Total											.58	+.00

*The average r between each item and each other item within the scale (including the item-total scale score) was obtained using the z coefficients as noted in Fisher and Yates, p. 54.

**The average r between each particular item in the scale and all items in the other five motivational scales was obtained using the z coefficients as noted in Fisher and Yates, p. 54.

Degrees of freedom = 490; r.05 = .074; (single underlined) r.01 = .105 (double underlined)

TABLE A.6: INCENTIVE TO AVOID WORK

(Interview Sample Completed)

	IAW2	IAW3	IAW4	IAW5	IAW6	IAW Total	Scale "r"	Avg.** "r" With Motivational Items not Within This Scale
IAW 1	+.52	+.50	+.31	+.31	+.33	+.65	.45	+.06
IAW 2		+.66	+.44	+.38	+.35	+.85	.56	+.03
IAW 3			+.44	+.39	+.33	+.83	.56	+.04
IAW 4				+.40	+.36	+.68	.49	+.04
IAW 5					+.75	+.77	.53	+.18
IAW 6						+.69	.49	+.17
IAW Total							.75	+.04

*The average r between each item and each other item within the scale (including the item-total scale score) was obtained using the z coefficients as noted in Fisher and Yates, p. 54.

**The average r between each particular item in the scale and all items in the other five motivational scales was obtained using the z coefficients as noted in Fisher and Yates, p. 54.

Degrees of freedom = 490; r.05 = .074; (single underlined) r.01 = .105 (double underlined)

APPENDIX B

DESCRIPTION OF THE STUDY SAMPLE

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This study sample is the same one described as the "Interview Sample Completed" in The Selection of Trainees Under MDTA. MDTA, of course, means the Manpower Development and Training Act. As was pointed out earlier, the population studied here included those persons who were registered with the Industrial, Commercial, and Service Offices of the Employment Service in Newark, New Jersey.

Since the original study intended to study the selection process related to MDTA training, the original population was divided so as to explore the selection mechanism and the subsequent training experience. In sampling from this population a deliberate attempt was made to develop strata conforming to these categories and hence relevant to the planned analytic comparisons. The eight classes were designated as follows:

1. Completed - Persons who entered and completed MDTA training courses between January 1, 1964, and March, 1965.
2. In Training - Persons in training during the interview phase of data collection during the summer of 1965.
3. Dropouts - Persons who started MDTA training and dropped out after one week or more, during the period January 1, 1964 through March, 1965.

4. Did not report - Persons who were either assigned to a training spot in a specific course and who never showed up to take the course, or who showed up for training for less than one week and then dropped out.
5. Accepted-pending - Persons who met the requirements of the selection officer and whose names were held in the files pending the start of an appropriate training course.
6. Rejected by MDTA - Persons who had been rejected by the MDTA selection officer.
7. Rejected by MDTA Training - A sample of those persons who had either rejected the idea of MDTA training when discussing the matter with the MDTA training officer or subsequently never took the necessary steps to pass the qualifications of the program, i.e. never came in when asked to take the necessary tests, or never came in for appropriate discussions after testing, etc.
8. Not contacted - Persons who never had any contact at all with the MDTA training or selection procedures.

The sources of data from which we obtained our universe included the active file which was taken to contain the universe of persons from within which trainees were ultimately selected. This file was composed of all those persons who voluntarily appeared at the Industrial, Commercial, and Service Offices of the State Employment Service in Newark to

seek the help of the Servie in finding a job or who were on the rolls because they were currently drawing unemployment insurance. It also included those persons who presented themselves at the Employment Service Office in response to advertising or other publicity regarding a projected training course. The latter persons might have been unemployed who had not wished to register or at least had not bothered to register for other purposes with the Employment Service. They might have been out of the labor force, but interested in training with a view toward entering or returning to the labor force. Or, they might have been persons who were currently employed or under-employed who saw in the training offered an opportunity to improve their position. In this sense, therefore, the population studied was drawn from a universe which was slightly different from that represented by most local office registrants. Since there was no efficient method of specifying or sampling the universe from which they were drawn; our sampling was confined to the population defined by the presence of an application card in the "active files" of the three Employment Service Offices. As of July 13, 1964, the three Employment Service Offices had approximately 20,000 active registrants. Most of these people were registered with the Industrial Placement Office while fewer were registered with the Commercial Placement Office, and even fewer were registered with the Service Placement Office.

The Interview Sample Completed

Individuals in each of the eight strata according MDTA status were selected into the sample that we attempted to interview during the period June to August, 1965.

The difficulties encountered in attempting to locate and interview persons drawn from an unemployed population are well-known. In order to accomplish our study design, which called for approximately 500 interviews, it was necessary to draw 1,009 names. We were able to induce a substantial proportion--222 out of a total of 500 individuals interviewed--to come to the Employment Service Office for interviews. In the remaining cases, interviewing for the most part took place in the homes of the respondents. The reasons for failure to complete interviews and the numbers ascribable to each were as follows:

Moved - unable to trace	307
Contact not possible for other reasons*	140
Refusals	37
In military service, hospital, or jail	18
Language Problem	3
Deceased	2
Interview schedule completed but not usable	2
Total	509

*In these cases we had evidence that the addresses were correct; but after several unsuccessful attempts to contact respondents, it was decided that the cost of additional pursuit was not warranted.

TABLE B.1

THE POPULATION AND THE INTERVIEW SAMPLE

MDTA Status	By Placement Office - Population		Interview Sample Drawn	Interview Sample Completed
No Contacts	Industrial	13,025	224	
	Commercial	5,204	86	
	Service	2,256	59	
		20,485	369	230
Accepted-pending	Industrial	318	152	
Rejected by MDTA	Commercial	235	120	
Rejected MDTA	Service	480	152	
		1,033	424	170
Completed training	Industrial	126	126	
In training	Commercial	86	86	
Dropout	Service	4	4	
Did not report		216*	216*	100
				Total 500

*This figure reflects the number of individuals who were assigned to courses; 169 persons actually started courses; 47 persons never reported to start courses.

The resulting sample structure and related data sources may be briefly noted.

1. Ten percent sample. A systematic ten percent sample of the Employment Service registered population was drawn from the active application card file during the final months of 1964. (N=1958.) Coding and analysis of the active application cards yielded estimated distributions of personal and occupational characteristics within the registered population.

2. Interview sample drawn. This stratified sample was composed of (a) persons drawn from the larger ten percent sample described above who had no contact with MDTA; (b) members drawn from the Manpower Training file who, according to information on the Manpower Training cards, had been rejected for training, had themselves rejected MDTA training, or who had been accepted pending the opening of a course; and (c) persons who, once enrolled for training, completed training, dropped out after one week or more, did not report or dropped out after attending less than one week, or, finally were in training at the time the sample was drawn. Persons enrolled for training were traced mainly through the Manpower Training Enrollment Form which is prepared at the time of enrollment, and partly through other training course records maintained by the selection and referral officer.

Members of this sample (N=1009) were drawn initially as candidates for interviewing or as replacements for interview subjects who could not be traced.

3. Interview sample completed. This is composed of 500 persons classified by MDTA status who were interviewed either in their homes or in one of the Employment Service offices during the summer of 1965. Interviews required approximately one and one-half hours and were performed with the aid of structured interview guides.

Data from the several sources listed were coded and prepared for analysis with the aid of computation facilities of the Rutgers Center for Information Processing.

Characteristics of the Interview Sample Completed

Remember that at the time this sample was selected all these individuals were listed with the Employment Service.

In Tables B.2 and B.3 we show some simple summary statistics that describe our study sample in a demographic sense. Most of our "interview sample completed" had completed high school; further, more than 54 percent were employed at the time they were interviewed. Nearly 60 percent were Negroes and over 52 percent were males. Most were either reared in the Newark area or in the southern United States. Those interviewed had relatively few dependents and their age distribution was rather flat, meaning that each age group was rather evenly represented.

TABLE B.2: CHARACTERISTICS OF THE "INTERVIEW SAMPLE COMPLETED"
(At the Time of the Interview) (N=500)

Education			Place of Birth			Number of Dependents			Age		
Highest Grade Completed	N	Percent	Where Were You Born?	N	Percent	Number of Dependents	N	Percent	Years	N	Percent
1 or less	3	0.6	Newark	132	26.4	None	221	44.2	18-20	13	2.6
2-3	11	2.2	Newark vicinity and N.Y.C. (not Newark)	84	16.8	1	78	15.6	21-25	78	15.6
4-5	11	2.2	Other New Jersey	9	1.8	2	55	11.0	26-30	71	14.2
6-7	20	4.0	Penna., N.Y. State (Note N.Y.C.)	29	5.8	3	49	9.8	31-35	74	14.8
8-9	77	15.4	Other Eastern States	13	2.6	4	35	7.0	36-40	62	12.4
10-11	116	23.2	South	170	34.0	5	12	2.4	41-45	59	11.8
12 or a technical or vocat nal education	202	40.4	Southwest	2	0.4	6	7	1.4	46-52	71	14.2
1-3 yrs. of college	46	9.2	Midwest, Rocky Mtns. and Far West	8	1.6	7	3	0.6	53-60	36	7.2
Completed college or more	13	2.6	Not in U.S.A. or Puerto Rico	50	10.0	8-14	10	2.0	Over 60	27	5.4
No Data	1	0.2	No Data	3	0.6	No Data	30	6.0	No Data	7	1.8
Total	500	100.0	Total	500	100.0	Total	500	100.0	Total	500	100.0

TABLE B.2 (Cont.): CHARACTERISTICS OF THE "INTERVIEW SAMPLE COMPLETED"
(At the Time of the Interview) (N=500)

Race			Employment Status			Sex		
Race	N	Percent	Present Status	N	Percent	Sex	N	Percent
Negro	295	59.0	Employed	271	54.2	Male	261	52.2
White	181	36.2	Unemployed	186	37.2	Female	239	47.8
Puerto Rican	11	2.2	Not in the Labor Force	37	7.4	Total	500	100.0
Oriental	1	0.2	Part-time	2	0.4			
No Data	12	2.4	No Data	4	0.8			
Total	500	100.0	Total	500	100.0			