

THE MEASUREMENT OF CAREER BEHAVIOR IN YOUNG MEN:
A PRELIMINARY REPORT*

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In search of more suitable criteria of career success than the occupational criteria which have commonly been used in the past, Super (1962) identified five types of behavior employed in coping with the vocational developmental tasks encountered at ages 18 to 25. These coping behaviors were developed logically from the relevant literature, and are: floundering, trial, instrumentation, establishment, and stagnation.

This paper reports an attempt to measure appropriate career behaviors, those which involve job or training moves. The problem is primarily one of quantifying aspects of behavior which will distinguish random movement (floundering) from trial behavior in which the subject progressively eliminates less suitable jobs and moves to more suitable positions, and from purposeful behavior (instrumental). Scales were devised to evaluate the wisdom of a sequence of position changes and the goodness of fit resulting from these changes. In short, the principle behind the scales is expressed by the question, "Does this move make sense for this person?"

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Ruth Seltzer assisted in the scoring of moves reported in this paper; Charles M. Super also did a substantial amount of scoring, and was responsible for computer work.

Method

Subjects are from the original ninth grade group of boys in Middletown, New York, with which the Career Pattern Study was begun in 1951. The data included here are from the histories of 70 of the subjects from May 1958 to May 1962, when they were approximately twenty-five years old. In 1962, 132 of the original group were interviewed and given a battery of questionnaires designed to tap relevant aspects of their education and training, military, employment, and personal histories, and to obtain data on their aspirations and self-evaluation. Not included in this analysis were 62 subjects whose activities during this period did not lend themselves to the scaling procedure because of full-time military duty (N=12), civilian careers interrupted by the draft (N=10), disablement (N=1), lack of work or training moves (N=15), interviews not transcribed at time of scaling (N=21), or non-availability of test scores (N=3).

Scaling was based on the information provided by the subjects, checked against reports from employers and school officials. The scales are listed in Table 1.

Scaling

Scale I. Change in Equity

This scale examines degree of carry-over of experience, training, pay rate, and worker benefits from one position to the next. A job move may involve loss of tenure, seniority, or profit-sharing; a move from training may involve loss of college credits, or gain in relevant experience in one's field.

Scale II. Realism of Subject's Reasons for Move

This scale consists of eight categories of reasons for making

a move, equally weighted in the total. The criterion of realism here was whether or not the dissatisfying aspects of the subject's prior job or training were remedied or lessened by the move.

Scale IIIA. Improvement in Abilities

Subject's abilities were compared with abilities required for average performance in each job or training-objective, as rated in Estimates of Worker Trait Requirements for 4,000 Jobs (U.S. Department of Labor, 1956) and the Revised Minnesota Occupational Rating Scales (Paterson, Gerkin, and Hahn, 1953). Both positive and negative discrepancies were weighted by squaring the deviations from the occupational norms.

Scale IIIB. Goodness of Fit in Terms of Measured Interests

Scores on the Strong Vocational Interest Blank, administered in 1962, were examined and each job held by a subject was classified on the basis of similarity to occupations in which he had A or B+ scores.

Scale IV. Progress Toward Goal

Goals stated by a subject in 1962 were compared with his previous and subsequent positions. If the latter were more evidently in line with goals, a plus score was given; if there was no progress, a 0 score; less demonstrable relation, a minus score. In cases in which there was no particular occupation or job in mind but in which goals were expressed in terms of security or location, positions were rated on the degree to which they provided this element.

Scale V. Improvement in Occupational and Educational Status

A. Improvement in Occupational Level. General socioeconomic demands and expectations--including the importance of maintaining family status--are reality considerations for subjects whose families are in

middle and upper level occupations. The socioeconomic level of the subject's family and his wife's family were rated on the Moser, Dubin, Shelsky revision of the Roe scale (1956). The discrepancies between the employment level of the subject and the levels of the two families were treated separately.

B. Improvement in Educational Level. Discrepancies between the educational levels attained by subjects on the one hand, and by fathers and fathers-in-law on the other, rated on the Heyde scale (1959), were handled in the same way as occupational discrepancies.

A move score on Scale V reflects progress from the level of the subject's first position. On the other scales involving discrepancies (IIIA, IIIB and IV), a move score shows the difference between prior and next position, or progress toward or away from a "good fit."

Additional career behaviors studied are number of times unemployed, length of time unemployed, number of months self-supporting, and number of jobs held, elapsed time being constant.

For this preliminary analysis of the scaled data, each subject's average score per move on each scale was calculated. Transformed standard scores were later computed so that scores on the individual scales could be summed to produce a total career development score for each subject.

Results

Table 2 shows that Scales I, II, and VB are positively inter-correlated, the r's ranging from .41 to .61. Maintaining or increasing equity, having a number of realistic reasons for moving, and attaining higher levels of education with position changes are inter-related characteristics of movement.

When relationships of the scales to other career behaviors are considered, only Scales I and II are related to number of jobs held ($r = -.50$ and $-.41$): subjects having the greatest increase in equity per move and most realistic reasons for moving tend to have made the smallest number of moves.

Only Scales I and VA are correlated with number of times unemployed: subjects with the highest records of unemployment had the greatest losses in equity and in occupational level per move.

Scales II, IIIB and VA are related to Scale IV: subjects having more realistic reasons for moving and moving in the direction of their measured interests and toward higher occupational levels tend also to be moving closer to their goals.

Of all scales and variables, only Scale IIIB is correlated with number of months self-supporting: subjects who moved to positions more in line with their measured interests tended also to be providing adequately for themselves and/or their families.

Scale IIIA, Improvement in use of abilities per move, is not significantly related to any other scale or variable. A test of the significance of the difference between group means revealed no gain or loss between initial and final scores for this scale. Perhaps use of abilities would contribute to the measurement if observations were made over a longer period of time than the four years covered in this analysis.

While the group as a whole does not show a significant difference between initial and final discrepancies for Scale IIIB, Use of interests, what individual progress did occur tends to be associated with the progress toward goal.

Subjects moved closer to their goals in this time period by an

average of .7 on a four-point scale, a difference significant at the .001 level.

While the group as a whole does not show a significant improvement in goodness of fit in terms of interests or abilities, some interesting relationships appear: there is a positive correlation between goodness of fit in terms of interests and in terms of abilities on the first job, but not on the last; number of jobs held subsequently is negatively related to goodness of fit on the first job in terms of interests, but not in terms of abilities. These relationships suggest that a lack of good fit in terms of interests is a greater motivation for change than a lack of good fit in terms of ability. Perhaps this is only because there is less opportunity for an able man in his early twenties to reach the higher level jobs which could make optimal use of his abilities. More thorough analysis and a longer time-span are needed before such speculations can be made with confidence, although it is worth noting that the tentative conclusion in this study concerning the relative predictive value of interests and abilities is in line with Berdie's (1955) finding.

Conclusions

Analysis of scales devised to evaluate the career development of young men from ages 21 to 25 has revealed three related characteristics: increasing occupational equity, having realistic reasons for moving, and attaining higher levels of education per move. In this sample, subjects who moved with good reason and with little loss of previously acquired training, benefits, and earning power made fewer moves in the four year period studied.

The group as a whole did not appear to be moving toward jobs

more appropriate to their abilities, but did appear to have made some progress toward their goals.

In the preliminary analysis only the average score per move was examined. More intensive analysis is planned which will take into account the individual's pattern of movement over longer periods of time, and which will include use of career behavior ratings, by qualified judges, based on the data which were scaled in this study.

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Definitions

The behaviors and definitions below, used in the preliminary report entitled "Measures of Career Behavior in Young Men" are based on descriptions in "The Definition and Measurement of Career Behavior: A First Formulation", a paper read by D.E. Super at the APGA convention in 1962.

- (1) **Floundering:** movement to a position which is not the logical next step for the one being vacated. Floundering may also be defined psychologically as movement to a job for which one lacks the psychological requirements or for which one is no better suited than for the vacated, and at least somewhat unsuitable, job.
- (2) **Trial:** movement from one related job to another, the next job having some characteristics of the preceding job but lacking others. Trial may be characterized by a zeroing in on a field or specialty. Trial should, in due course, lead to establishment, and when it fails to do so it takes on some of the characteristics of floundering. Trial may also be defined as movement into a job for which one has some of the desirable psychological characteristics, to a greater degree than was true of the vacated job.
- (3) **Instrumentation:** behavior which enables the individual to prepare for or enter a regular adult occupation in which he can achieve a degree of self-fulfillment. It differs from floundering and stagnation in that it is goal-directed, from trial in that it does not imply questioning of the goal.

Definitions (continued)

- (4) Establishment: achievement of stability in an occupation in which one can function as a normal adult, and which does not involve stagnation. Establishment may be psychologically defined as stabilization in an occupation for which one has the requisite abilities and interests, as shown by tests and inventories.
- (5) Stagnation: remaining on a job or in an occupation longer than is good for the individual concerned. It is not just remaining static, it is, instead, remaining in a deteriorating situation. Stagnation involves staying in a job or occupation for which one is not suited by abilities and interests, a job which will therefore not permit the individual to establish and support a family or to take a normal adult place in society.

Table 1
Means, Standard Deviations and Ranges of Subjects' Average-Score Per Move
on Career Development Scales and Scores on Other Career Behaviors

Variable	Mean	Standard Dev.	Range
Scale I* Change in Equity	1.12	.77	-.17 to +2.5
Scale II Realism of Reasons for Move	2.88	1.62	-.33 to +5
Scale IIIA. Improvement in Use of Abilities	.46	3.00	-4.5 to +11
Scale IIIB. Improvement on Goodness of Fit to Interests	.02	.48	-1 to +2
Scale IV Progress Toward Goal	.32	.51	-1 to +1
Scale VA. Improvement on Occupational Level	.11	.61	-1.2 to +2
Scale VB. Improvement in Educational Level	.19	.33	0 to +1
No. of Times Unemployed	.70	1.28	0 to 7
No. of Months Unemployed	1.80	3.74	0 to 17
No. of Months Self-Supporting	36.56	13.50	0 to 48
No. of Jobs Held	3.31	1.31	2 to 7

* On Scales I through VB, scores range from 0 ("no") upward ("much").

Table 2
Intercorrelations of Presumed Measures of Career Behavior

	I	II	IIIA	IIIB	IV	VA	VB	No. Times Unemployed	No. Months Unemployed	No. Months Self-Supporting	No. of Jobs Held
Scale I Change in Equity	--	.50**	.01	.19	.12	.24*	.41**	-.28**	-.19	.06	-.50**
Scale II Realism of Reasons of Move	.50**	--	.12	.18	.36**	.18	.61**	-.14	-.13	-.04	-.41**
Scale IIIA Improvement in Use of Abilities	.01	.19	--	.12	.17	.07	-.07	-.10	-.14	-.02	-.08
Scale IIIB Improvement in Goodness of Fit to Interests	.18	.18	.16	--	.35**	.11	.00	-.03	-.03	.36**	.08
Scale IV Progress Toward Goal	.12	.36**	.17	.35**	--	.21*	.17	.01	.05	.11	-.16
Scale VA Improvement in Occupational Level	.24*	.18	.07	.11	.21*	--	.05	-.27*	-.22*	-.13	-.13
Scale VB Improvement in Educational Level	.41**	.61**	-.07	.00	.17	.05	--	.05	.03	.04	-.19
No. of Times Unemployed	-.28**	-.14	-.10	-.03	.01	-.27*	.05	--	.88**	-.07	.13
No. of Months Unemployed	-.19	-.13	-.14	-.03	.05	-.22*	.03	.88**	--	-.13	.09
No. of Months Self-Supporting	.06	-.04	-.02	.36**	.11	-.13	.04	-.07	-.13	--	.05
No. of Jobs Held	-.50**	-.41**	-.08	.08	-.16	-.13	-.19	.13	.09	.05	--

* p=.05 or better
** p=.01 or better

Note: A correlation coefficient of .203 is significant at the .05 level, and of .284 at the .01 level, one-tailed test.