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# VOCATIONAL REHABILITATION IN NORTHERN SWEDEN. II

*Some Psycho-socio-demographic Predictors*

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**ABSTRACT. In this prospective investigation a consecutively referred series of vocational rehabilitation clients was studied using eleven socio-demographic and psycho-social items. Subjected to a factor analyses these items were included in five factors which explained 74% of the variance. By discriminant analysis the items could correctly classify 57% of those subjects who faced major vocational changes or were vocationally inactive. The level of experienced health and belief in vocational return had the heaviest overall predictive impact. The findings may help specialists in medical and vocational rehabilitation to estimate the likelihood of vocational return for somatically impaired subjects.**

*Key words:* vocational rehabilitation, psycho-social aspects, disability, motivation, outcome.

This investigation was designed as an attempt to deduce whether it was possible to characterize a consecutive series of vocational rehabilitation clients by a pattern of socio-demographic and psycho-social parameters. A major aim was to explore the possibility of finding simple prognosticators for the outcome of vocational rehabilitation.

The investigation is Part II of a prospective analysis of a consecutive series of subjects who, due to bodily impairment, were referred for vocational rehabilitation to employment offices in the Umeå district of Northern Sweden. In Part I (5) the roles of these offices and types of interventions they used have been described and some socio-demographic characteristics of the particular population were brought into focus: at referral approximately 60% were receiving sickness benefit or unemployment allowance while the remaining nearly 40% were vocationally active. Very few could be classified as "handicapped" according to the WHO (27) except that they had vocational handicaps. The vast majority of those who were vocationally active when referred were still at work two years later while 64% of those who were receiving sickness benefit/unemployment allowance initially were then gainfully employed or undergoing vocational training.

In the years 1975, 1980, 1985 the overall costs of the National Labour Market Board (NLMB), which is responsible for all employment offices in Sweden, amounted to 1.6, 2.3, 2.7% respectively of the Swedish Gross National Product. Throughout this period the cost of vocational rehabilitation was roughly 16% of the NLMB budget (21). In spite of the considerable national funds allocated for vocational rehabilitation, an amount which in 1985 was 3.2 billion SEK, only a few investigators have concerned themselves with examining prognosticators for the outcome of vocational rehabilitation.

During the 6-year period 1980–1986 the proportion of those who were vocationally disabled due to bodily impairment increased from approximately 60% to about 70% of all vocational rehabilitation clients. The largest single group was that with musculo-skeletal dysfunction (40%; cf. 21). As illustrated in Table I there was a considerable increase in the prescription of special arrangements and of technical devices at the working place during the period 1975–1985 (17). These interventions are aimed at facilitating remaining in/returning to financially gainful work for subjects with vocational disabilities.

In Sweden Elmfeldt (6), using 57 variables, tried to predict the outcome of vocational rehabilitation for 208 somatically or mentally vocationally disabled clients at an employability assessment center. She could not, however, demonstrate that any of these demographic, psycho-social or intellectual variables were of particular prognostic value. Román (23) in a prospective study of mentally impaired or socially disabled vocational rehabilitation clients in Northern Sweden showed that low age, former education and profes-

Table I. *Number of subjects for whom special arrangements and technical devices were prescribed by Swedish vocational rehabilitation for three different years during the period 1975–1985. The relative costs in relation to the National Labour Market Board (NLBM) budget for the various years is given*

| Budget year | Special arrangements at the place of work | | Special technical devices | | Total % of the NLMB budget |
|---|---|---|---|---|---|
| | *n* | Million SEK | *n* | Million SEK | % |
| 1975 | 261 | 2.7 | 460 | 1.4 | 0.1 |
| 1980 | 893 | 16.7 | 2 089 | 8.4 | 0.24 |
| 1985 | 1 013 | 19.9 | 3 764 | 28.7 | 0.24 |

sional experience were favourable prognosticators of vocational outcome. These findings are in general agreement with Gogstad (13).

In south-western Sweden Esbjörnsson (7) studied a sample of chronic low-back patients on admission to and one year after discharge from the Department of Rehabilitation Medicine, Sahlgrens Hospital, Gothenburg. On admission all had been receiving sickness benefit for at least three months. Through stepwise analyses she arrived at a prognostic instrument correctly classifying 90% of the subjects in the working group and 83% of the subjects in the sick-listed group. The instrument included four factors: optimistic-pessimistic view of life, task rigidity, sociability and self-image.

## SUBJECTS

The target population were all 175 subjects with a diagnosis of somatic ill-health as the given cause of vocational disability, who were referred to the Umeå district vocational rehabilitation service throughout a five-month period (October 1984–February 1985). Of these, 149 volunteered to participate in the initial part of the investigation (for further details see 5). Two years later it was possible to locate and to obtain information on the current source of income for all subjects.

## METHODS

All initial measurements were based on structured interviews which were all conducted by the same investigator (M. E.). The items intended to measure different "psycho-social" experiences, which were found to be of particular interest are given in the appendix which also gives the answering alternatives. Vocational stimulation and motivation were measured using items taken from Esbjörnsson (7). In her investigation she factor analyzed 77 questions, each answerable on a 7-grade Likert scale. Ten of these items (5 questions and 5 postulates) dominated a factor which she termed vocational stimulation and 14 (1 question and 13 postulates) had high loads in a factor labelled by her: vocational motivation. In the present investigation all these questions were used (Appendix A and B) but modified. Thus, a 2-grade scale was used for each item. This enabled computation of a stimulation index ranging from 0 (low experienced stimulation from past or present job) to 10 (high stimulation). Similarly a motivation index ranged from a low of 0 to 14.

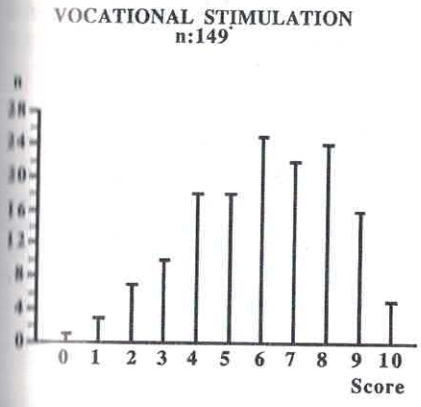
For analyzing satisfaction with different aspects of past or present job we used Simovici's job satisfaction questionnaire (24). This questionnaire (Appendix C) includes 8 items and ranges from a minimum of 0 to a maximum of 16.

Vocational satisfaction (i.e. satisfaction with the present vocational situation), belief in vocational return and subject's experienced health were each assessed using a 6-grade ordinal scale (Appendix D). These questions were developed by us. A total of 6 psycho-social self-description variables were thus included as psycho-social indicators.

Furthermore, 5 socio-demographic variables were included in the statistical analyses. These were age (registered as real age), sex (male/female), educational level (dichotomized into compulsory school/further education), income (dichotomized into <median/>median income for the Umeå district) and employment situation (employee/self-employed).

At the 2-year follow-up the subjects reported their present vocational status. Thus different outcome categories could be computed: Group A ($n=28$, 19%) consisted of subjects who had the same job both at referral and at follow-up. As previously shown (6) the vast majority ($n=27$) had only counselling and/or technical aids to maintain their employment situation. Group B ($n=63$, 42%), contained two sub-groups namely the 28 subjects who were vocationally active when referred but for whom new jobs were found and the 35 subjects who were on sickness benefit or on unemployment allowance when referred but were vocationally active at follow-up. The reason for combining these two sub-groups was that the interventions were quite similar. Group C ($n=24$, 16%) consisted of those who were undergoing vocational training or education at follow-up, while subjects in Group D were either receiving sickness benefit or unemployment allowance on both occasions ($n=29$, 20%) or had become vocationally inactive at follow-up ($n=5$, 3%). For a more detailed description of interventions, see Eklund et al. (5).

*Statistics.* To deduce whether, at referral, a characteristic combined pattern of social and demographic variables characterized the sample, a factor analysis with varimax rotation



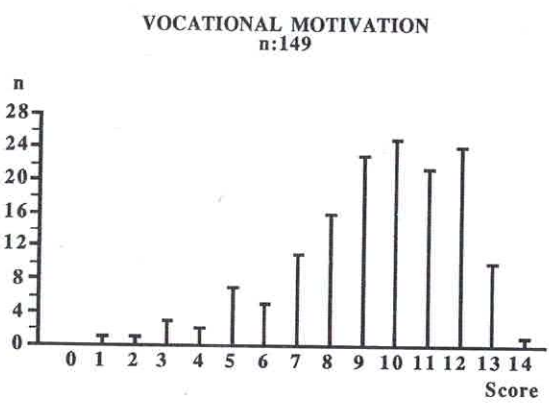




*Fig. 1.* Vocational stimulation and motivation.

including all 11 variables was performed. Factors with Eigenvalues lower than 1.0 were excluded. The cut-off limit for a variable to be considered a significant contributor to a factor was 0.50. To characterize differences (mentioned only when significant; $p \leqslant 0.05$) at referral between the four outcome groups A–D the factor scores were analysed using ANOVA followed by post-hoc tests.

The likelihood of subjects in any of the outcome groups B, C and D presenting common (intra-group) socio-demographic and/or psycho-social characteristics was gauged using discriminant analysis. All 11 items were included in this prognostic analysis. The criterion for acceptance was $p \leqslant 0.05$ (Wilks' Lambda). We did not consider individual items to be significant contributors if they had standardized discriminant coefficients below 0.20. All computations were performed with SYSTAT® used in a Macintosh Plus computer.

## RESULTS

*Initial investigation.* Fig. 1 shows that only a minority had low scores for vocational stimulation (median 6, range 0–10) and motivation (median 10, range 1–14). This was also the case for the job satisfaction index (Fig. 2) where the median score was 9 (range 1–15). In contrast, the level of satisfaction with the present vocational situation (Fig. 3) was rather low (median 3, range 1–6). In fact, nearly 2/3 assessed their vocational situation as unsatisfactory (scores $\leqslant 3$). An equally low median score for experienced health (Fig. 4; median 3, range 1–6) was evident and 41 % felt that they never or very rarely felt healthy. In spite of this, the vast majority (77%, cf. Fig. 5) believed that they were at least likely to stay in/return to a vocationally active life.

The factor analysis including all 149 clients (Table II) appeared logically to circumscribe all 11 variables within five factors which explained 74% of the vari-


*Fig. 2.* Job satisfaction.

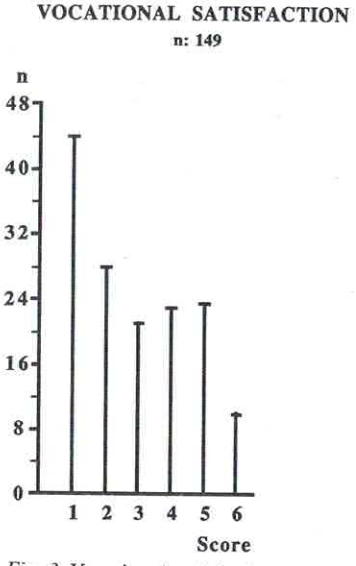



*Fig. 3.* Vocational satisfaction.

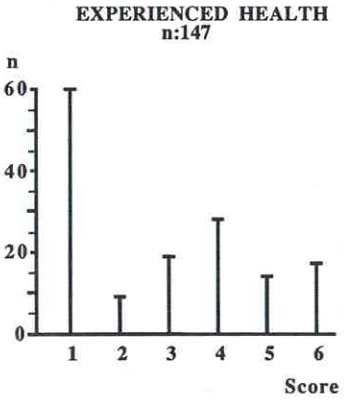



*Fig. 4.* Experienced health.

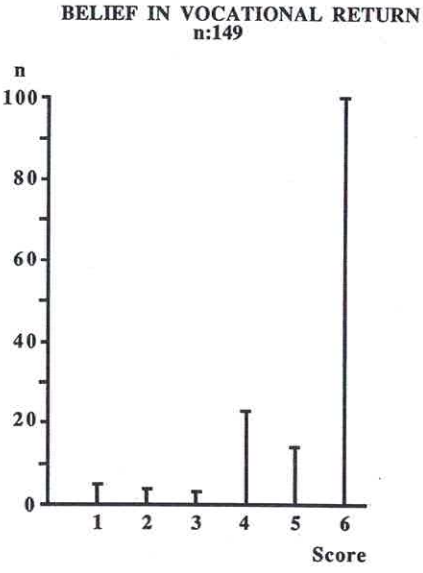



*Fig. 5.* Belief in vocational return.

ance. These were: Factor I (19% of the variance) which combined vocational stimulation (0.9) and job satisfaction (0.9). Factor II (16% of variance) incorporated the variables age (0.5), vocational motivation (0.8) and belief in vocational return (0.8).

Factor III (12% of variance) encompassed education (0.8) and income (0.6), while Factor IV (14% of variance) included sex (0.8) and the variable describing the client as self-employed or an employee (0.7). Age was almost a significant contributor in this factor (load 0.48).

Finally Factor V (13% of variance) contained voc tional satisfaction (0.8) and experienced health (0.7)

Using individual factor scores Table III elucidat the differences in the psycho-socio-demographic pa tern at referral among the four outcome groups. It shown that scores for Factors IV and V were syste

Table II. *Factor analysis with rotated principal component loadings for the five factors in the group of Norther Swedish bodily impaired vocational rehabilitation clients (n=149)*

| Factors | Factor I | Factor II | Factor III | Factor IV | Factor V |
|---|---|---|---|---|---|
| Eigenvalue | 2.8 | 1.9 | 1.2 | 1.2 | 1.0 |
| Vocational stimulation | **0.9** | −0.1 | −0.1 | 0.1 | 0.1 |
| Job satisfaction | **0.9** | −0.2 | −0.0 | 0.0 | −0.0 |
| Belief in vocational return | 0,1 | **−0.8** | −0.2 | 0.1 | 0.1 |
| Vocational motivation | 0.3 | **−0.8** | 0.0 | 0.1 | 0.2 |
| Age | 0.3 | **0.5** | 0.2 | 0.48 | 0.3 |
| Educational level | −0.0 | −0.2 | **−0.8** | −0.1 | −0.1 |
| Income | 0.4 | 0.1 | **−0.6** | 0.3 | 0.4 |
| Sex | 0.2 | 0.1 | 0.3 | **0.8** | −0.0 |
| Self-employed/ Employee | 0.3 | −0.2 | 0.3 | **0.7** | −0.0 |
| Vocational satisfaction | 0.2 | −0.1 | −0.0 | 0.2 | **0.8** |
| Experienced health | −0.2 | −0.4 | 0.0 | −0.2 | **0.7** |
| Explained variance | 19% | 16% | 12% | 14% | 13% |
| Total variance explained | 74% | | | | |

Table III. *The matrix characterizing differences in factor scores between the different outcome groups (A–D)*

| | Outcome groups | | | | | |
|---|---|---|---|---|---|---|
| | A vs. B | A vs. C | A vs. D | B vs. C | B vs. D | C vs. D |
| Factor I | NS | NS | NS | NS | NS | NS |
| Factor II | NS | NS | A↑(0.01) | NS | B↑(0.05) | C↑(0.05) |
| Factor III | NS | NS | A↑(0.05) | NS | NS | NS |
| Factor IV | A↑(0.00) | A↑(0.00) | A↑(0.00) | B↑(0.02) | NS | NS |
| Factor V | A↑(0.00) | A↑(0.00) | A↑(0.00) | NS | NS | NS |

atically significantly higher for group A than for all the other groups. The factor scores for Factor II were significantly higher in the successful (A, B and C) than in the unsuccessful group D. Finally the scores for Factor III were significantly higher in group A than in group D while scores for Factor IV were significantly higher in group B than in group C.

*Prediction of outcome.* We chose not to include group A (i.e. the subjects who were vocationally active in the same job both when first seen and at the follow-up 2 years later) in the discriminant analysis performed to deduce whether one or a small set of the variables could correctly classify the outcome groups. The reasons were that among these 28 subjects (Table IV) 16 had been furnished with technical aids as the only intervention. These 16 subjects included 6 of the 7 farmers. A further 11 clients received counselling only; while one client had by-passed the employability assessment center. Thus, the group was so relatively easily rehabilitated that it appeared rather uninteresting to search for particular predictors.

Table IV shows that neat proportions of the subjects in groups B (53%), C (57%) and D (65%) could be correctly classified when all 11 variables were entered in the discriminant analysis. This analysis was significant ($p \leqslant 0.05$). The major overall predictors were: Experienced health and belief in vocational return; but age also had a considerable prognostic impact. In fact, only two of the variables (sex and job satisfaction) had standardized discriminant coefficients below 0.20.

Although the analysis *per se* shows that the outcome of vocational rehabilitation in Umeå could be predicted for nearly 60% of the sample, the factorial combination of variables appeared to be of very limited pragmatic importance. The group classification function coefficients given in Table V appear to be more interesting. These coefficients characterize the relative prognostic importance of the actually measured variables for each outcome group. They may therefore provide useful information for the rehabilitation staff and/or the vocational counsellor: For group B the only fairly important prognosticator was relatively low satisfaction with the vocational situation at the time of referral. Different prognosticators emerged for group C. These were a relatively young

Table IV. *Correctly classified subjects in groups B, C and D*

| | | Correctly classified | | |
|---|---|---|---|---|
| Actual | *n* | Group B (%) | Group C (%) | Group D (%) |
| Group B | 63 | 53 | 32 | 15 |
| Group C | 24 | 22.5 | 57 | 22.5 |
| Group D | 34 | 12 | 23 | 65 |

Totally 57% correctly classified

Discriminant coefficients: Experienced health 0.8 > Belief in vocational return 0.6 > Age 0.5 > Income 0.4 > Education 0.3 > Employment status 0.3 > Vocational motivation 0.3 > Vocational stimulation 0.3 > Vocational satisfaction 0.3. All other coefficients <0.20.

Table V. *Group classification function coefficients in prediction of vocational outcome using psycho-socio-demographic variables (n=11). The independent variables are arranged according to their distribution in factors*

| | Group B $n=63$ | Group C $n=24$ | Group D $n=34$ |
|---|---|---|---|
| Correctly classified | 53% | 57% | 65% |
| Vocational stimulation | −0.1 | −0.1 | 0.2 |
| Job satisfaction | −0.1 | −0.1 | 0.2 |
| Belief in vocational return | −0.1 | 0.3 | −0.6 |
| Vocational motivation | −0.1 | −0.3 | 0.2 |
| Age | 0.1 | −0.6 | −0.4 |
| Educational level | 0.1 | −0.1 | −0.3 |
| Income | −0.0 | −0.1 | −0.5 |
| Sex | −0.0 | 0.2 | 0.2 |
| Self-employed/employee | −0.1 | 0.5 | 0.3 |
| Vocational satisfaction | −0.3 | −0.1 | 0.1 |
| Experienced health | −0.0 | −0.3 | −0.8 |

age, not being self-employed, relatively low vocational motivation, a relatively low level of experienced health and, in contrast, a relatively high belief in vocational return. The major prognosticators for group D were experiences of being in ill health most of the time, having relatively low belief in a return to work and, to some extent, a relatively low income, being relatively young and an employee, and finally a relatively low level of education.

## DISCUSSION

One of the two major features of this investigation is its reasonably successful attempt to characterize the sample of vocational rehabilitation clients in Northern Sweden by a limited set of factors. Two of these (Factors III and IV) are clearly socio-demographic descriptors; while three (Factors I, II and V) contain only psycho-social items. Interestingly none of the factors explained exclusively high or low proportions of the variance.

The other major feature is the reasonable accuracy—an average of 57%—by which psycho-social and socio-demographic variables could classify the subjects' vocational outcome.

### *The situation at admission to vocational rehabilitation*

The pair of variables which dominated Factor I appear to characterize (different aspects of) Work Enrichment derived from previous or current work. I Simovici's (24) analysis of job satisfaction withi heavy industry it was demonstrated that 76% an 50% of white and blue collar employees, respectivel had a high level (score 6–16) of job satisfaction. W cannot even tentatively explain the significantly high er level (89%) found in the present study. A propo tion which, nevertheless, appears to be quite congru ent with that found by Esbjörnsson (7). This facto moreover did not differ among the various outcom groups (cf. Table III). A finding which also agree with that of Esbjörnsson (7) that vocational stimula tion was a comparatively poor predictor for return t work.

Factor II appears to reflect belief in and motivatio for future work capacity. Accordingly, we interpre this factor as describing Vocational Drive, which t some extent is dependent upon age. The impact o motivation on return to work after medical rehabilita tion has been pointed out by several other authors. I has, for instance, been demonstrated that patient with a high motivation for recovery and return t work have a favourable attitude towards self and hav a realistic view of their ideal selves (2). A positiv ideal self is a positive factor for a patient's coopera tion in vocationally oriented rehabilitation (18, 28) Positive beliefs in vocational return are characteristi of individuals who keep their dependency needs in check (22), who are not confined to hopelessness (19) and who are able to make correct decisions concern ing solutions to their problems (9). Furthermore, the successfully medically rehabilitated subject has been characterized by positive, hopeful, future oriented attitudes (4), showing a high degree of field independ ence (1) and with rather flexible domains for future goals (8). That characterization is congruent with the fact that level of Vocational Drive was systematically lower for group D—the group of failed rehabilita tion—than for the successful clients.

In Elmfeldt's investigation from the early 1970s (6) compulsory school was the highest level of educatio for about 3/4 of the population studied, in Román's investigation (approximately 5 years later, 23) com pulsory school was the highest level of education fo about 60%, while our respondents reported a 50/50 distribution for compulsory school/further theoretical and practical education. This apparent time depend ence may simply reflect socio-political changes with more easily accessible education. As pointed out else where (5) the median male, but not female income was significantly lower than the average for the corre

sponding age group within this Northern Swedish area, this was particularly true for vocationally inactive males. Moreover, income and educational level were significantly correlated. Thus, it appears quite reasonable for Factor III to include only the two variables: educational level and income. For this factor we prefer the term: Educational Inequality, which appears to make a clear distinction (cf. Table III) between two rather "polarized" groups: Those continuing in the same job and those who were vocationally inactive at follow-up.

Previously (5) it was shown that within this sample significantly more elderly males were self-employed. These items (sex and employment status) also formed factor IV. At one extreme of the factor were male self-employed clients, at the other female employees. Thus, this factor in our interpretation characterizes: Vocational Establishment. It therefore appears reasonable that it differentiated between those in education on the one hand and on the other those vocationally active in the same job or those who had returned to work after vocational inactivity (cf. Table III).

In an investigation of life satisfaction among 25–55 year old unselected inhabitants of Umeå, Fugl-Meyer et al. (11) recently found an age and gender independent level of satisfaction with current vocational situation. In that sample nearly 60% reported that they were satisfied or very satisfied. Hence, the level of satisfaction with current vocational situation found in the present study was low. Moreover, the experienced health in a normal Umeå population aged 40–64 years was investigated by Gerdle & Björgren (12) who found that 69% of the males and 76% of the females felt they were healthy most of the time. The much lower (11%) proportion found here which is in general agreement with the findings of Romàn, 23) evidently represents a significant difference, a difference which emphasizes the relative ill-health of the vocational rehabilitation clientele.

Vocational satisfaction (at the time of admittance) and level of experienced health were combined into a very stable factor (Factor V). This factor in one extreme appears to characterize the vocationally satisfied subjects who feel that most of the time they are without somatic complaints, evidently a rather small group. At the other extreme are those who feel they suffer ill-health somatically as well as vocationally. We therefore labelled this factor Vocational Health; which was exclusively good for those (group A) who had the same job both on admittance and at follow-up.

The findings that this group was systematically characterized by higher scores for Vocational Health and Vocational Establishment than were the other three outcome groups and further had higher Vocational Drive and was less educationally disadvantaged compared to the failure group explains why it is a particularly easily rehabilitated group. This is further elucidated by the fact that practically all of the subjects could be dealt with by means of simple counselling or technical aids. Furthermore, Hurme (15) demonstrated that in Finland a vocational status of independent entrepeneur is a positive predictor for future vocational activity in patients operated for lumbar disc herniation.

*Prediction of outcome*

It would be tempting to analyze the predictive effect of the factors above. Such an analysis would however, as already mentioned, be of little pragmatic value for the specialist in vocational rehabilitation in his daily work. Moreover, as shown in Table III, within groups B, C and D only few differences in factor scores were found. For these two reasons the predictive analysis was performed entering the answers to the questions actually used during the interview.

Group B, the returnees to a new job, had no very clear prognosticator. If any, dissatisfaction with the vocational situation—whether or not vocationally active—on admittance appeared to have a stimulating effect for vocational return. Somewhat surprisingly high vocational motivation, which was a predictor of some importance in Esbjörnsson's investigation (7), had no positive effect for this—or for any other group.

It appears reasonable that a relatively young age and being a vocationally disabled employee with limited freedom to modify the vocational situation predisposes a subject to vocational training or education (group C). This choice is reinforced by relatively low motivation to work in subjects who feel that they are in a state of relatively ill-health but believe that they can probably return to a job when properly trained.

That ill-health in combination with low expectations for future work capacity were the major predictors for the unsuccessful group D is at least partly confirmed by Maeland & Havik (19) in Norwegian post-myocardial infarction subjects. They found that perceived low level of global health was significantly associated with low rate of return to work.

The finding that relatively low age can be a negative prognostic factor for vocational (re-)adjustment is in

contrast to that reported by other investigators. Thus, increasing age is an obstacle to vocational rehabilitation in "mixed" samples of chronically ill or "handicapped" subjects (16, 20), after cerebral infarction (14), in bypass operated subjects with coronary sclerosis (26) and in chronic low back-pain sufferers (10). This discrepancy concerning the effect of age may be due to the fact that only a few of the subjects studied by us were classified as physically "handicapped" according to the normative categorization proposed by the World Health Organization (cf. 5). Moreover, the mean age of our sample was relatively low.

The relatively low income which also characterizes group D is difficult to explain from the variables used in this investigation. The fact that this group is also predicted—although to a lesser extent—by low educational level classifies it as socio-economically disadvantaged (cf. the factor: Educational Inequality). To the specialist in vocational rehabilitation this group of relatively young "knocked outs" (3) calls for special attention.

In summary, the prognostic analysis indicates that two questions may be of particular importance for assessing the likelihood of a successful outcome for vocational rehabilitation. These two questions (also see Tables IV and V) are the subjects' own experienced health and their belief in regaining a vocational potential. Vocational consellors should find these two questions quite easy to pose during the first interview with a recently referred client.

## ACKNOWLEDGEMENT

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## APPENDIX A

*Modified vocational stimulation questionnaire*

Answer the following 10 items:

To what degree do you feel you have been able to influence your work? (0=to a low degree; 1=to a high degree).

To what degree have you been able to influence your working pace at your present/former job? (0=to a low degree; 1=to a high degree)

To what degree do you feel that your present/former job has been interesting and stimulating? (0=to a low degree; 1=to a high degree)

To what degree do you feel you have been able to utilize your abilities and knowledge in your present/former job? (0=to a low degree; 1=to a high degree)

To what degree do you feel your present/former job is/was monotonous and a matter of routine? (0=to a high degree; 1=to a low degree)

Special knowledge and competence are needed to accomplish the work tasks I have had. (0=no; 1=yes)

At home they were very keen that my school reports should be good. (0=no; 1=yes)

I always make my morning toilet according to a fixed routine and always follow strict habits concerning getting up in the morning and dressing. (0=yes; 1=no)

My former/present job has hardly given me the satisfaction I had hoped to get. (0=yes; 1=no)

I often feel that I have no influence on the development of my life. (0=yes; 1=no)

*Vocational stimulation index (range 0–10)*

## APPENDIX B

*Modified vocational motivation questionnaire*

Answer the following 14 items:

If at the present moment I could make a choice I would prefer to be on sickness benefit/on premature pension. (0=yes; 1=no)

My nearest relatives feel that it would be better for me to get a premature pension. (0=yes; 1=no)

When one has been/is absent from work one becomes accustomed to and rather enjoys being at home. (0=yes; 1=no)

I avoid starting/continuing to work because I feel I would not make it. (0=yes; 1=no)

It often happened that I felt/feel discomfort in the morning when going to work. (0=yes; 1=no)

Usually it is easier when other people decide and arrange things for me. (0=yes; 1=no)

I believe there is a risk I will get worse if I start/continue to work. (0=yes; 1=no)

I always complete the tasks I have started even if they are not so important (0=no; 1=yes)

My nearest relatives believe that I will soon recover so that I can start/continue working. (0=no; 1=yes)

Work gives me a special satisfaction that I can hardly get in another way. (0=no; 1=yes)

After a period of training at work I certainly believe I will make it. (0=no; 1=yes)

One feels more valuable as a human supporting oneself through one's own work than if one gets the support from elsewhere. (0=no; 1=yes)

How do you assess your possibilities of returning to/continuing to work? (0=no possibilities; 1=great possibilities)

*Vocational motivation index (range 0–14)*

## APPENDIX C

*Job satisfaction questionnaire*

How satisfying are/were the following aspects of your former/current job?

0=dissatisfying
1=moderately satisfying
2=satisfying

| | |
|---|---|
| Physical environment | Tasks |
| Income | Chances of advancement |
| Peers | Recognition |
| Supervision | Responsibility |

*Job satisfaction index (range 0–16)*

## APPENDIX D

*Vocational satisfaction*

How satisfying is your present vocational situation? Indicate the number which best suits you.

| | |
|---|---|
| 1: Very dissatisfying | 4: Rather satisfying |
| 2: Dissatisfying | 5: Satisfying |
| 3: Rather dissatisfying | 6: Very satisfying |

1 2 3 4 5 6

*Experienced health*

How often do you feel healthy? Indicate the number which best suits you.

| | |
|---|---|
| 1: never/very rarely | 4: rather often |
| 2: rarely | 5: often |
| 3: rather rarely | 6: very often/always |

1 2 3 4 5 6

*Belief in vocational return/continuation*

How likely is it that you will continue in/return to work? Indicate the number which best suits you.

| | |
|---|---|
| 1: very unlikely | 4: rather likely |
| 2: unlikely | 5: likely |
| 3: rather unlikely | 6: very likely |

1 2 3 4 5 6

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