

Success and failure in the labour market¹

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Summary

In previous research on unemployment, conflicting evidence has been found for a 'reverse causation interpretation', indicating that prolonged unemployment is a consequence of psychological distress instead of the reverse. The present longitudinal study was conducted to test this reverse causation explanation. A second issue addressed in this study was whether getting a job or not depends more strongly on subjective or psychological factors than on objective factors (e.g. a person's biographical background, length of unemployment). Two independent samples were examined: Sample 1 ($n = 635$) consisted of school-leavers, and sample 2 ($n = 467$) consisted of subjects who had been unemployed for more than one year. Some support was found for the reverse causation explanation. In addition, more than objective factors, a strong job orientation and a problem focused coping style appeared to be a precursor of success in the labour market. Accordingly, getting a job seems to be primarily a function of one's own efforts.

Introduction

Studies on unemployment basically show that unemployment is associated with higher levels of mental distress (Banks and Jackson, 1982; Bolton and Oatley, 1987; Feather, 1990; Hepworth, 1980; Kessler, House and Turner, 1987; Kirchler, 1985; Lahelma, 1989; Melville, Hope, Bennison and Barraclough, 1985; Schwefel, 1986; Warr, 1984; Warr, Jackson and Banks, 1988; Winefield, Tiggeman, Winefield and Goldney, 1991). In most cross-sectional studies, it is assumed that mental distress is an *effect* of unemployment, and some authors of longitudinal studies have reason to justify this assumed causal relationship. However, a four-wave longitudinal study of Kasl and his co-workers (Kasl, Gore and Cobb, 1975) demonstrated that *no* causal relationship exists between employment status and depression-scores among blue collar workers who were confronted with a factory closure. Even more so, other studies demonstrate that some people are psychologically distressed at any moment, whereas others are not (Fergusson and Horwood, 1984; Henderson, Byrne and Duncan-Jones, 1981; Ormel and Schaufeli, 1991; Schaufeli and VanYperen, 1992). These studies show that about two-thirds of the variance of psychological distress in the long term can be explained by a stable vulnerability component (i.e. mental health), in contrast to a changing component, such as unemployment.

Thus, it is by no means self-evident that psychological distress is a consequence of a negative life-event such as unemployment. In contrast, some studies support the alternative labour market selection hypothesis or the 'reverse causation interpretation', (Kasl, 1982, p. 641), which maintains that a high level of psychological distress is likely to lead to prolonged unemployment, and a low level of distress increases the chance of future employment. For example, Iversen and Sabroe (1988) found that initial scores on the General Health Questionnaire—an indicator of minor psychiatric morbidity—were significantly lower among laid-off shipyard workers who were still unemployed after one year compared to their former colleagues who managed to

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find a job. In a study of Dooley, Catalano and Brownell (1986), no difference was found in the level of depression between employed and unemployed *after* controlling for initial depressed mood. The best predictor of follow-up depression appeared to be initial depression. Finally, mixed findings were obtained by Winefield and Tiggeman (1985). They disentangled predisposing factors and effects of unemployment in a large sample of over 1000 intended school-leavers. Their complex results indicate that depressed mood and poor self-esteem were antecedents as well as effects of unemployment.

There appears to be some evidence that psychological distress is a predisposing factor of unemployment. However, other studies suggest that objective factors, including age, sex, and length of unemployment, are also crucial determinants of being successful in finding a job. Warr and Jackson (1985) examined longitudinally a sample of 629 registered male unemployed with an interval of nine months. Multiple regression analysis revealed that only two variables made a significant independent contribution to whether or not an individual remained out of work: age and length of unemployment. Men aged between 20 and 59, and those who had been unemployed for shorter durations, had the best prospects of finding new jobs. Although the intensity of job seeking and employment commitment at time 1 correlated substantially with re-employment at the follow-up, none of these factors was a significant predictor in regression analysis. In addition, Tiggeman and Winefield (1989) reported that unemployment can be best predicted by background variables of ethnic origin, socio-economic status, and family unemployment. In their study, unique explained variance was not provided by personality and attitudinal measures. On the other hand, at a three months' follow-up Kjos (1988) found no differences with respect to objective factors between successful and non-successful job seekers.

Apparently, several studies suggest that a selection process takes place in the labour market. Demographic variables, including age, type of education, and sex, as well as mental distress, may operate as a selection criterion. In this respect, two selection processes must be considered: Selective dismissal and selective hiring. In the first case, the less healthy (oldest, etc.) workers are most likely to get dismissed, and in the latter case, the most healthy (youngest, etc.) unemployed are most likely to get the jobs. Obviously, both selection processes can take place simultaneously.

The present study was conducted in order to identify subjective or psychological, as well as objective determinants of success and failure in the labour market. The three related questions to be answered are: (1) Do future employed and unemployed individuals differ initially? (2) To what extent can success in the labour market be predicted? (3) Which kind of variables (i.e. objective or subjective) are most powerful in predicting success in the labour market?

Method

The previous questions were examined in two samples. Both samples exclusively include respondents who graduated from schools for Higher Professional Education².

² The Dutch system of higher education differs considerably from that in other countries. The most characteristic feature is the distinction between two types of educational institutions; universities and schools for Higher Professional Education. The difference between these institutions is historical rather than systematic. At the universities, students are in principle prepared for theoretical work in the pure sciences and arts, whereas in professional schools they are trained in the applied arts and sciences. (e.g. engineering, administration, health, education, welfare and agriculture). Rather inconsistently, the training of some other professionals such as physicians, dentists, lawyers and psychologists, takes place at the universities. Both educational institutions offer a four-year programme, after which the students obtain a degree or diploma. After their graduation from a professional school, students may continue their education on a more theoretical level at the university for two or three years. Basically, all graduates are admissible to PhD programmes. However, only university graduates actually avail themselves of this opportunity. In the Netherlands approximately 200 000 students are enrolled in professional studies and 150 000 in universities.

Sample 1

A total of 1524 school-leavers received a questionnaire when they were still at school. All of them would graduate in the next six months. The *T*-response rate was 42 per cent ($n = 635$; 63 per cent men, 37 per cent women). It is most likely that this somewhat low response rate is due to the timing of the study: The subjects were approached during the term that they prepared themselves for their final exams. The mean age was 22.8 years (*S.D.* = 2.2, range: 21–35 years). The sample appeared to be representative for the population of Dutch professional graduates with respect to gender and type of education (Schaufeli, 1988a, pp. 105–106). Four follow-ups were conducted after graduation with 6-month intervals (T_1 to T_4). Drop-out rates ranged from 7 per cent to 20 per cent. In total, 493 respondents participated throughout the study. They did not differ significantly from the respondents who dropped out with respect to biographical background, type of training, psychological characteristics, and labour market behavior (Schaufeli, 1988a, p. 107).

Sample 2

A virtually identical questionnaire as used in sample 1 was sent to 1136 subjects who had been registered as unemployed for more than one year at the Labour Office. The response rate was similar to sample 1: 41 per cent ($n = 467$; 44 per cent men, 56 per cent women)³. The mean age was 29.8 years (*S.D.* = 5.4 years, range: 23–53 years). According to sex and length of unemployment, the sample was representative for the sub-population of the registered long-term unemployed in the Netherlands (Schaufeli, 1988a, pp. 110–111).

In contrast to respondents of sample 1, who did not have any work experience in a previous professional job, 79 per cent of the respondents of sample 2 had work experience. The average number of years employed was 2.6 years, varying from only 1 month to 8 years (*S.D.* = 31 months). The majority (61 per cent) had been employed full-time, and 39 per cent had been working on a temporary basis.

After one year, a follow-up was conducted among the 317 respondents, who had returned their addresses separately from the questionnaire on a special form one year earlier (T_1). The response rate at the follow-up at T_2 was 82 per cent ($n = 261$). Some 43 per cent ($n = 111$) had found a job, whereas 42 per cent ($n = 110$) were still looking for employment. Thirty-eight respondents (i.e. 15 per cent) whose employment status, at T_2 was unknown or who had another status (e.g. student, early retired) were excluded. Unfortunately, 64 respondents removed their identification numbers, so that the data from both occasions could not be linked. Due to occasional missing data, we were left with 166 complete records for longitudinal analysis. Respondents and non-respondents at the follow-up did not differ systematically with respect to biographical background, psychological characteristics, and labour market behavior (Schaufeli, 1988a, p. 112).

Table 1 below shows the number of successful and unsuccessful applicants in sample 1 and sample 2. Respondents of sample 1 who either continued their education, or who entered compulsory military service were excluded ($n = 96$). Due to the small number of respondents at T_3 and T_4 , only the first two follow-ups of sample 1, and the follow-up of sample 2 were analyzed.

Measures

The predictors of success or failure in the labour market are presented in Table 2. Success was operationalized as having found a paid (part-time) job of at least 20 hours per week.

³ A complementary mail survey was carried out among the non-respondents in order to explore the reasons for not returning the questionnaires. The response rate of this survey was 25 per cent ($N = 164$). The reason most frequently mentioned was that a (part-time) job had been found (37 per cent). Taking this into account the actual response rate of study 2 must have been substantially higher.

Table 1. Success and failure in the labour market: The numbers of successors and non-successors

	T_1	Sample 1		Sample 2	
		T_2	T_3	T_4	T_2
Successors	184	98	26	11	111
Non-successors	195	64	20	9	110
Total	379	162	46	20	221

Only respondents who also unsuccessfully applied on previous follow-up(s) were included.

Table 2. Predictors of success and failure in the labour market

Predictor variable	Operationalization
<i>Biographical characteristics</i>	
Age*	Years
Sex	Male/female
Marital status	Partner/no partner
Type of education	Classification
<i>Situational attributes</i>	
Length of unemployment*	Months
Financial strain†	Rating scale
Unpaid work†	Dichotomy
Work experience†	Dichotomy
<i>Labour market attitudes and behaviors</i>	
Willing to accept less qualified job†	Dichotomy
Willing to accept a part-time job†	Dichotomy
Willing to move†	Dichotomy
Intensity of job search behavior†	Number of applications
<i>Dispositions</i>	
Self-esteem	Multi-item questionnaire
Locus of control	Multi-item questionnaire
<i>Psychological distress</i>	
<i>Coping and attribution</i>	
Appraisal of unemployment	Rating scale
Problem focused coping	Multi-item questionnaire
Causal attribution for unemployment	Multi-item questionnaire
<i>Lack of social support</i>	
<i>(Non) work attitudes and cognitions</i>	
Instrumental work orientation	Multi-item questionnaire
Non-work orientation	Multi-item questionnaire
Perceived control over unemployment	Multi-item questionnaire
Employment commitment	Rating scale
Estimated success on the labour market	Percentage
Estimated unemployment rate†	Percentage

*Only in sample 2.

†Not in sample 1 at T_0 .

Persons who did not succeed in getting such a job remained unemployed and were considered as failures in the labour market. The first two clusters of predictors (i.e. geographical background and situational attributes) include the objective factors. The remaining clusters contain the subjective or psychological factors.

Only the multi-item questionnaires will be briefly described (for more detailed information about the utilized measures, see Schaufeli, 1988a, pp. 115–122 and pp. 218–220).

Self-esteem

Self-esteem was assessed by an adapted Dutch version of Coopersmith's (1967) Self-Esteem Inventory (Helbing, 1982). In the present study Cronbach's alpha's of this six-item scale ranged from 0.90 to 0.94 in both samples.

Locus of control

Locus of control was measured by a questionnaire that was based on Rotter's (1966) I-E-scale (Andriessen and Cadsand, 1983). In this study, two weakly negatively correlated ($r = -0.31$) subscales were employed: Internal locus of control (seven items) and external locus of control (10 items). Cronbach's alpha's of both subscales ranged from 0.70 to 0.75.

Psychological distress

The respondents' last weeks' general level of psychological distress was assessed by the Dutch version (Arrindell and Ettema, 1986) of the Symptom Checklist 90 (Derogatis, Lipman and Covi, 1973). Although the SCL-90 is a multi-dimensional instrument covering a broad range of psychopathology, the symptom-dimensions could not be sufficiently differentiated from each other (Schaufeli, 1988a, pp. 135–136). Therefore, only one composite-score for psychological distress was employed. Cronbach's alpha's of this 90-item measure ranged from 0.95 to 0.96 in both samples.

Problem-focused coping with unemployment

Problem-focused coping with unemployment was measured by a self-constructed eight-item scale that included items such as: 'Talk to people who might help you look for a job'; 'Visit companies or phone for a job' and 'Make inquiries about vacancies as much as possible'. A high score on this scale indicates a coping mode characterized by active job hunting. Cronbach's alpha's ranged from 0.85 to 0.86 in both samples.

Causal attribution of unemployment

Causal attribution of unemployment was assessed by the Causal Dimensions Scale (Russell, 1982). Unfortunately, in the present study only the locus of causality subscale appeared to be valid and reliable (Schaufeli, 1988b). A high score on this dimension indicates an external perception of the cause of one's unemployment. Cronbach's alpha's of this five-item measure ranged from 0.85 to 0.87 in both samples.

Lack of social support

Lack of social support was measured by six-items of the Social Support Questionnaire of Lin, Dean and Ensel (1981). The original subscale structure could not be retrieved in our samples so that an alternative scale was constructed. A high score on this scale indicates that the person experiences a lack of emotional support from others. Cronbach's alpha's ranged from 0.82 to 0.84 in both samples.

Instrumental work orientation

Instrumental work orientation was measured by a seven-item subscale of the Work-Orientation Questionnaire of De Vos (1980). A high score indicates an attitude towards work predominated by the financial aspect. Cronbach's alpha's ranged from 0.76 to 0.84 in both samples.

Non-work orientation

Non-work orientation was measured by a self-constructed scale that included seven items expressing a positive attitude towards non-working and receiving unemployment benefits (e.g. 'It's better to be unemployed than to have a tiresome job'; 'Receiving unemployment benefits is a proper way to "earn a living"'). Cronbach's alpha's ranged from 0.71 to 0.72 in both samples.

Perceived collective control over unemployment

Perceived collective control over unemployment was also measured by a self-constructed scale. A person with a high score on this scale believes that unemployment can be controlled collectively (e.g. 'The unemployed should join some organization that defends their interests'; 'A proper government policy will create more jobs'). Cronbach's alpha's of this nine-item measure ranged from 0.70 to 0.77 — in both samples.

Results

Three Multivariate Analyses of Variance (MANOVA's) were executed to test the initial differences between successful and unsuccessful applicants of sample 1 at T_1 and T_2 , and of sample 2 at T_2 . All variables were included of sample 1 at T_0 and at T_1 , and of sample 2 at T_1 , respectively, that were measured on interval-scales (see Table 2). Additionally, non-parametric chi-square tests were employed to examine initial differences between these groups with respect to the ordinal variables (i.e. sex, marital status, type of education, unpaid work, work experience, willingness to accept less qualified work, to accept a part-time job, and willingness to move).

Thus, in the first MANOVA, it was tested in sample 1 whether or not initial differences existed between future employed and unemployed at T_1 while they were still at school (T_0). As dependent variables were included the predictors of the following clusters (see Table 2): Dispositions, psychological distress, coping and attribution, lack of social support, and (non)-work attitudes and cognitions, except estimated unemployment rate⁴.

The significant multivariate group difference indicates that future employed and unemployed respondents of sample 1 already differed when they were still at school ($F_{(13,270)} = 5.25$, $p < 0.001$). Subsequent univariate testing of the means (see Table 3) revealed that unsuccessful job applicants compared to their successful counterparts initially reported less self-esteem, appraised unemployment less negative, used less problem solving strategies, had a more positive non-work orientation, experienced less collective control, showed less employment commitment, and were much more pessimistic about their success in the labour market. The results of the non-parametric chi-square tests show that future employed and unemployed did not significantly differ in marital status ($\text{Chi}^2_{(1)} = 3.28$, n.s). However, the school-leavers' sex ($\text{Chi}^2_{(1)} = 7.18$, $p < 0.01$) and type of education ($\text{Chi}^2_{(5)} = 38.19$, $p < 0.001$) appeared to be a relevant factor for future success in the labour market. Male school-leavers and school-leavers with a background in engineering found jobs relatively easy, particularly compared to females and those with a background in education or welfare.

In sum, the results suggest that dispositions, coping behavior, as well as (non)work attitudes and cognitions play a significant role in finding a job immediately after leaving school. Moreover, objective factors like sex and type of education seem to be important too.

A second MANOVA was carried out in order to test whether or not those of sample 1 who found jobs at T_2 and those who did not, initially differed at T_1 . An identical set of dependent

⁴ Age was *not* included in the analyses of sample 1 because of the relatively small standard deviation. Most school-leavers were about the same age.

Table 3. Initial differences of successors and non-successors on the labour market

	Sample 1				Sample 2								
	T ₁ successors (n = 184)		T ₁ Non successors (n = 195)		T ₂ successors (n = 98)		T ₂ Non successors (n = 64)		T ₂ successors (n = 111)		T ₂ Non successors (n = 110)		
	M	S.d.	F	M	S.d.	M	S.d.	M	S.d.	M	S.d.	M	S.d.
Biographical characteristics													
Age	—	—	—	—	—	—	—	—	—	28.1	4.5	29.3	5.1
Situational attributes													
Length of unemployment (months)	—	—	—	—	—	—	—	—	—	23.9	12.9	24.0	10.9
Financial strain	—	—	—	—	2.71	1.3	—	2.4	1.5	0.73	3.4	3.0	1.4
Labour market behaviors													
Intensity of job searching	—	—	—	—	16.1	15.6	—	8.5	6.9	8.55*	24.1	20.4	9.8
Dispositions													
Self-esteem	36.7	6.2	34.3	8.8	6.93*	35.6	8.4	35.3	7.4	0.03	34.9	9.6	9.6
Internal locus of control	15.8	4.2	15.1	4.5	1.98	15.3	4.5	15.8	3.8	0.42	14.0	4.1	14.4
External locus of control	14.5	5.1	14.4	5.5	0.06	12.9	5.3	13.3	6.0	0.18	16.5	5.6	15.0
Psychosocial distress	31.4	29.8	33.8	30.8	0.34	25.5	19.8	24.3	23.8	0.07	34.0	28.6	39.3
Coping and attribution													
Appraisal of unemployment	4.3	1.0	4.7	1.0	7.48*	3.2	1.2	3.6	0.9	2.72	3.0	1.4	3.6
Problem focused coping	17.7	4.1	15.5	4.2	20.30†	12.7	4.7	9.7	3.8	13.24†	12.5	4.3	8.3
External causal attribution	18.9	4.5	19.6	4.4	2.57	17.4	6.1	16.3	7.1	0.80	18.6	6.5	14.9
Lack of social support	2.6	2.2	2.3	2.0	1.08	2.0	2.9	2.7	2.8	1.29	2.2	2.5	3.3
(Non)work attitudes													
Instrumental work orientation	4.8	3.5	4.1	3.5	2.36	4.7	3.9	3.6	3.4	2.21	4.4	3.9	3.3
Non-work orientation	6.8	4.1	8.8	5.0	12.56†	8.3	4.7	10.2	5.6	3.81†	8.1	4.8	11.9
Perceived control	20.6	5.9	22.7	5.8	8.38*	22.6	5.5	23.2	5.1	0.32	24.0	4.7	24.6
Employment commitment	5.0	1.0	4.5	1.2	16.55†	4.9	0.9	4.3	1.0	9.24*	4.8	1.1	3.8
Estimated success	62.7	27.8	43.4	25.2	36.40†	46.2	26.1	36.6	25.9	3.83†	34.2	29.4	16.9
Estimated unemployment	—	—	—	—	—	42.0	26.0	43.8	23.5	0.13	35.7	24.9	38.7

†p < 0.05.

*p < 0.01.

‡p < 0.001.

variables was included as in the first MANOVA, supplemented by financial strain, intensity of job search behavior, and estimated unemployment rate. Again, the successful and unsuccessful applicants differed significantly ($F_{(16,95)} = 1.95, p < 0.05$). Univariate analyses revealed a similar pattern as described earlier, i.e. differences in coping behavior and (non)work attitudes and cognitions, but *not* in dispositions. Compared to successful applicants, unsuccessful applicants were characterized by less intensive job search behavior, less problem focused coping behavior, a more positive attitude towards non-work, less employment commitment, and less confidence in getting a job.

No initial differences between the groups were observed in sex ($\text{Chi}^2_{(1)} = 2.55, \text{n.s.}$), marital status ($\text{Chi}^2_{(1)} = 1.45, \text{n.s.}$), type of education ($\text{Chi}^2_{(5)} = 2.14, \text{n.s.}$), willingness to accept less qualified jobs ($\text{Chi}^2_{(1)} = 0.02, \text{n.s.}$) or to accept part-time jobs ($\text{Chi}^2_{(1)} = 0.19, \text{n.s.}$), and willingness to move ($\text{Chi}^2_{(1)} = 1.01, \text{n.s.}$). However, future employed were significantly more often voluntarily involved in unpaid work than future unemployed ($\text{Chi}^2_{(1)} = 13.63, p < 0.001$). Apparently, type of education and sex are not important any more for finding a job once the school-leavers are unemployed for a couple of months.

Finally, the third MANOVA tested whether or not the re-employed respondents of sample 2 differed from the prolonged unemployed respondents who were still without a job after another year. An identical set of dependent variables as in the previous MANOVA was included, supplemented by age and length of unemployment (see Table 2). Likewise, in sample 2 a significant initial difference was found between the future employed and re-employed group ($F_{(18,66)} = 3.10, p < 0.001$). Subsequent inspection of the univariate results revealed a consistent pattern of results. Compared to successful applicants, unsuccessful applicants were characterized by less intensive job search behavior, less self-esteem, a more positive appraisal of unemployment, less use of problem solving strategies, internal causal attribution, strong non-work orientation, less work commitment, and more pessimism about future employment. No significant differences between the two groups were found with regard to sex ($\text{Chi}^2_{(1)} = 0.21, \text{n.s.}$), type of education ($\text{Chi}^2_{(6)} = 7.60, \text{n.s.}$), work experience ($\text{Chi}^2_{(1)} = 2.04, \text{n.s.}$), or willingness to accept a less qualified job ($\text{Chi}^2_{(1)} = 0.89, \text{n.s.}$), to accept a part-time job ($\text{Chi}^2_{(1)} = 0.20, \text{n.s.}$), or to move ($\text{Chi}^2_{(1)} = 1.34, \text{n.s.}$). However, in comparison to future employed, future unemployed were more often single ($\text{Chi}^2_{(1)} = 6.01, p < 0.05$), and were less often engaged in unpaid work ($\text{Chi}^2_{(1)} = 8.06, p < 0.01$). Remarkably, for the long-term unemployed group, marital status seems to be important in future success in the labour market.

In conclusion, the results of both samples clearly indicate that stronger job oriented subjects had better employment prospects than those who were less job oriented. Specifically, successful applicants were, compared to their unsuccessful counterparts, characterized by a more negative appraisal of unemployment, stronger problem-focused coping (i.e. more active job hunting), a lower non-work orientation, and higher employment commitment. In addition, they were more voluntarily engaged in unpaid work, spent more time in searching for a job, expressed more confidence in finding a job, and reported higher initial levels of self-esteem than unsuccessful applicants.

Some initial differences were found exclusively in the school-leaver sample. Compared to the future unemployed, school-leavers who obtained a job perceived less collective control, and were more likely to be male and to have a technical than an educational or welfare training. These factors did not seem to play a role when the duration of employment increased. On the other hand, in the long-term unemployed sample, two particular initial differences were found. More future employed were married, and they attributed their unemployment more often to external factors than the future unemployed did.

It should be emphasized that the univariate differences must be interpreted with caution

since the parametric and the non-parametric tests, as well as the mutual non-parametric tests, are not independent. For instance, long-term unemployed who are married and have family responsibilities might have looked for jobs more intensively than their unmarried fellows, thereby increasing the likelihood of finding a job. Furthermore, school-leavers with a technical education are predominantly male, whereas females have more often been educated in welfare so that it is not completely clear whether the school-leaver's type of education or sex predicts future success in the labour market. Accordingly, three stepwise regression analyses were conducted to provide additional tests for the predictive power of all independent variables. Similarly to the MANOVA's, the employment status (employed versus unemployed) was related to the predictor variables that were assessed one time-period earlier (see Table 2). In order to consider the effect of the respondents type of education on their future employment status, five dummy coded variables were included, indicating whether a respondent had a welfare, educational, health, engineering, administrative or agricultural background.

In Table 4 it is shown that the regression analyses generally revealed similar results as the MANOVA's, although somewhat more parsimoniously. In sample 1, for instance, 20 per cent of the variance of the respondents' future employment status six month after leaving school was explained by only three out of the nine variables (including sex and type of education) on which the respondents differed when they were still at school (see Table 3). The largest contribution (12 per cent) was made by the respondents' confidence in getting a job, whereas a problem focused way of coping with unemployment explained another 3 per cent of the labour market success. Additionally, school leavers with a background in engineering (3 per cent) and administration (2 per cent) were relatively successful in the labour market.

A total of 18 per cent of the variance in employment status at T_2 was explained by two out of the six variables (including the involvement in unpaid work) on which they differed at T_1 (see Table 3). A problem oriented way of coping with unemployment at T_1 explained 12 per cent of the variance in employment status at T_2 . Whether or not the unemployed person was engaged in unpaid activities also significantly contributed to their future success in getting a job (6 per cent explained variance).

Finally, in sample 2, 30 per cent of the variance in future labour market success at T_2 was explained by four out of the 10 variables (including marital status and the involvement in unpaid work) on which they differed one year earlier (see Table 3): Self-esteem (4 per cent), a problem oriented way of coping with unemployment (17 per cent), marital status (9 per cent), and confidence in getting a job (6 per cent). An additional 5 per cent (which makes a total of 41 per cent) was explained by age.

In sum, the results of the regression analyses suggest that a problem focused way of coping with unemployment, as well as an optimistic view on getting employed are the most important predictors of future employment. In sample 1, the involvement in unpaid work and type of education also play a role in this respect. In sample 2, a high self-esteem, and being young and married seem to be important. Thus, objective factors (i.e. age and marital status) only played a role in predicting re-employment in the long-term unemployed sample.

Discussion

Three main issues have been raised in this article: initial differences between future employed and unemployed, the prediction of success in the labour market, and the relative importance of objective and subjective variables in this respect. Before discussing our findings, it should be noticed that our analyses of success in the labour market are explorative, since a firm theoretic-

Table 4. Predictors of success and failure in the labour market (stepwise multiple regression)

	Sample 1		Sample 2
	$T_1(n = 379)$	$T_2(n = 162)$	$T_2(n = 221)$
	β	β	β
<i>Biographical characteristics</i>			
Age			-0.26*
Sex	0.04	0.17	0.09
Marital status	-0.08	-0.17	0.28*
Social and welfare education	-0.05	-0.05	-0.06
Teacher education	0.10	0.00	0.05
(Para)medical education	-0.02	-0.00	-0.14
Engineering education	0.23†	-0.10	-0.10
Administrative education	0.13†	0.08	0.05
Agriculture education	0.07	-0.08	0.05
<i>Situational attitudes</i>			
Length of unemployment			-0.01
Financial strain		0.06	0.09
Unpaid work		0.24*	0.00
Work experience			0.08
<i>Labor market attitudes and behavior</i>			
Accept less qualified job		-0.06	-0.10
Accept part-time job		0.10	0.08
Willing to move		-0.06	-0.02
Intensity of job searching		0.11	0.17
<i>Dispositions</i>			
Self-esteem	0.08	-0.03	0.19†
Internal locus of control	-0.04	-0.06	-0.11
External locus of control	0.02	0.03	0.11
Psychological distress	0.06	0.00	0.01
<i>Coping and attributions</i>			
Appraisal of unemployment	-0.01	-0.06	-0.06
Problem focused coping	0.20*	0.34‡	0.34*
External causal attribution	-0.04	0.00	0.13
Lack of social support	0.00	-0.09	-0.01
<i>(Non)work attitudes</i>			
Instrumental work orientation	0.04	-0.12	0.05
Non-work orientation	-0.09	-0.06	-0.18
Perceived control	-0.08	-0.09	-0.10
Employed commitment	0.07	0.15	0.17
Estimated success	0.23‡	0.10	0.26*
Estimated unemployment rate		0.05	0.01

† < 0.05.

* < 0.01.

‡ < 0.001.

Note: only the significant B's are included in the regression equation

cal body is lacking and empirical studies are rare and yield conflicting results. Moreover, the somewhat low response rates of both samples might have influenced the results because of selection bias.

The results of the present study clearly indicate that future employed were initially stronger job oriented than future unemployed. This was observed in the school-leaver sample, as well as in the long-term unemployed sample. A strong job orientation was indicated by a problem oriented coping style, a high level of employment commitment, negative appraisal of unemploy-

ment, a weak non-work orientation, spending much time and effort on job-searching, being engaged in unpaid work as a volunteer, and having much confidence in getting a job. Moreover, the regression analyses revealed that a problem focused way of dealing with unemployment as well as an optimistic view on getting employed, were most consistently related to future employment. These results suggest that *self-selection* is taking place in the labour market. A poor job orientation and an inappropriate coping style decrease the chance of getting a job.

Apparently, subjective factors are more important in predicting future success in the labour market than objective factors. However, in sample 2, 14 per cent of the variance of success in the labour market was explained by biographical factors, indicating that employers tend to select young and non-single long-term unemployed. In the school-leaver sample, biographical factors played a minor role, probably because of the biographical homogeneity of this sample. Since unemployment rates are higher among females than among males, and higher among human services professionals than among technical or administrative professionals (HBO-Almanak, 1985), it is not very surprising that the chance of finding a job is dependent on one's sex and education. However, the lack of predictive power of these variables among the long-term unemployed suggest that the respondents' sex and type of education only matters for their success when they enter the labour market immediately after leaving school. Once they have been unemployed for a certain period of time, their biographical background ceased to be a significant predictor of success.

Other objective unemployment related factors, including length of unemployment, financial strain, and work experience, had no influence upon successful job seeking behavior (*cf.* Kjos, 1988). The reason that financial strain was not related to re-employment might be due to the relatively high Dutch unemployment benefits at the time the current study was carried out (Schaufeli and Van Yperen, 1992). Although Dutch unemployed will also experience some financial deprivation, no tendency could be observed that this might be a reason for looking for a job more intensively.

The importance of engagement in work-like activities for future employment, which was also shown by Pelzmann (1985) in an Austrian female sample, merits special attention. She argued that informal activities, for which in many cases the unemployed were paid, did compensate the negative impression of inactivity by employers. Furthermore, when unemployed are involved in (un)paid activities, relevant social contacts are maintained that may provide important information, for example, about vacancies.

Some indirect support was found for the proposition that selection in the labour market is taking place on the basis of mental health (i.e. the 'reverse causation interpretation'). In sample 2, the level of self-esteem of the long-term unemployed explains a significant proportion of the variance in success in the labour market. In addition, the successful job-seekers of sample 1 reported a higher self-esteem when they were still at school than their failing counterparts. Accordingly, it can be speculated that a poor level of self-esteem prevents success in the labour market, but it may also decrease as an effect of unemployment (*cf.* Winefield and Tiggeman, 1985). Particularly in times of mass unemployment it is quite likely that unemployed persons with poor self-esteem will have more difficulties in finding a job.

The fact that psychological distress did *not* explain a significant proportion of the variance in success in the labour market, as predicted by the 'reverse causation interpretation', might be due to selection bias. It cannot be completely ruled out that the most distressed subjects did not participate in our study. This is supported by the recent observation of winefield, Tiggeman and Winefield (1991), who found that unemployed and dissatisfied employed were more likely to discontinue participation in their longitudinal study than the satisfied employed.

Although the relationship between actual job seeking behavior and job attainment needs

to be examined, self-reported job seeking behavior appears to be an important predictor of getting employed. The present study shows that the future employed are initially stronger job oriented than future unemployed. Similarly, in a large sample of young British unemployed, Ullah, Banks and Warr (1985) found that those who had little expectation of obtaining a job, showed less job seeking activities and gradually withdrew from the labour market. Their study was, however, cross-sectional so that future success in the labour market could not be predicted. Such a prospective analysis was carried out by Feather and O'Brien (1986). In a comprehensive paper, they presented the results of four studies which were conducted over a period of three years in various Australian school-leaver samples, and included almost 5000 young people. Although their main interest was to examine the psychological effects of unemployment, they made an interesting additional observation: 'The results also suggest that those who obtained jobs, saw themselves somewhat more active and motivated as far as commitment to employment was concerned' (p. 141). However, it should be emphasized that this statement cannot be reversed, although some people may attempt to do so. In other words, devoting one's energy to seeking employment does not necessarily imply ending up with a job. The effect of problem focused coping behavior or job seeking behavior upon success in the labour market has been demonstrated by Gray and Braddy (1988). They found in their experimental study that an alternative job searching programme facilitated worker employment significantly better than the normally available services did. In a similar vein, Vinokur, Price and Caplan (1991) showed in a randomized field experiment that unemployed persons in the experimental group who had received job search skill training not only were more likely to find a job than those in the control group, but also they obtained better paying and better quality jobs. Although some studies suggest that demographic factors or stable psychological characteristics are the main predictors of future unemployment (*cf.* Tiggeman and Winefield, 1989; Warr and Jackson, 1985), the experiments of Gray and Braddy (1988) and of Vinokur *et al.* (1991), as well as the main finding of the present study, offer a more optimistic view: As far as well educated individuals are concerned, the chance of gaining employment seems to be mainly a function of one's own efforts.

References

- Andriessen, J. H. T. H. and Van Cadsand, J. P. (1983). 'Een analyse van de Nederlandse I-E schaal' (An analysis of the Dutch I-E scale), *Nederlands Tijdschrift voor Psychologie*, **38**, 7-24.
- Arrindell, W. A. and Ettema, J. H. M. (1986). *SCL-90: Handleiding bij een multi-dimensionele psychopathologie-indicator* (SCL-90: Manual for a multidimensional indicator of psychopathology), Swets & Zeitlinger, Lisse.
- Banks, M. H. and Jackson, P. R. (1982). 'Unemployment and risk of minor psychiatric disorder in young people: Cross-sectional and longitudinal evidence', *Psychological Medicine*, **12**, 789-798.
- Bolton, W. and Oatley, K. (1987). 'A longitudinal study of social support and depression in unemployed men', *Psychological Medicine*, **17**, 453-460.
- Coopersmith, S. (1967). *The Antecedents of Self-Esteem*, Freeman, San Francisco.
- Derogatis, L. R., Lipman, R. S. and Covi, L. (1973). 'SCL-90: An outpatient psychiatric rating scale: Preliminary report', *Psychopharmacological Bulletin*, **9**, 13-27.
- De Vos, H. H. (1980). 'Het meten van werkoriëntaties: een vergelijking van verschillende technieken voor het meten van houdingen' (On assessing work orientation: A comparison of different techniques for assessing attitudes). Unpublished PhD thesis, University of Groningen, Department of Sociology.
- Dooley, D., Catalano, R. and Brownell, A. (1986). 'The relation of economic conditions, social support, and life events to depression', *Journal of Community Psychology*, **14**, 103-119.
- Feather, N. T. (1990). *The Psychological Impact of Unemployment*, Springer Verlag, New York.
- Feather, N. T. and O'Brien G. E. (1986). 'A longitudinal study of the effect of employment and unemployment on school-leavers', *Journal of Occupational Psychology*, **59**, 121-144.

- Fergusson, D. M. and Horwood, L. J. (1984). 'Life events and depression in woman', *Psychological Medicine*, **14**, 881-889.
- Gray, D. O. and Braddy, B. A. (1988). 'Experimental social innovation and client-centered job-seeking programs', *American Journal of Community Psychology*, **16**, 325-343.
- HBO-Almanak (1985). Almanac for Higher Professional Education, HBO-raad, Den Haag.
- Helbing, J. C. (1982). 'Zelfwaardering: Meting en validiteit' (Self-esteem: Measurement and validity), *Nederlands Tijdschrift voor Psychologie*, **37**, 257-275.
- Henderson, A. S., Byrne, D. G. and Duncan-Jones, P. (1981). *Neurosis and the Social Environment*, Academic Press, Sydney.
- Hepworth, S. J. (1980). 'Moderating factors of the psychological impact of unemployment', *Journal of Occupational Psychology*, **53**, 139-146.
- Iversen, L. and Sabroe, S. (1988). 'Psychological well-being among unemployed and employed people after a company closedown: A longitudinal study', *Journal of Social Issues*, **4**, 141-152.
- Kasl, S. V. (1982). 'Strategies of research on economic instability and health', *Psychological Medicine*, **12**, 637-649.
- Kasl, S. V., Gore, S. and Cobb, S. (1975). 'The experience of losing a job: Reported changes in health, symptoms, and illness behavior', *Psychosomatic Medicine*, **37**, 106-122.
- Kessler, R. C., House, J. S. and Turner, J. B. (1987). 'Unemployment and health in a community sample', *Journal of Health and Social Behavior*, **28**, 51-59.
- Kirchler, E. (1985). 'Job loss and mood', *Journal of Economic Psychology*, **6**, 9-25.
- Kjos, D. L. (1988). 'Job search activity patterns of successful and non-successful job seekers', *Journal of Employment Counseling*, **25**, 4-6.
- Lahelma, E. (1989). 'Unemployment, re-employment and mental well-being: A panel survey of industrial jobseekers in Finland', *Scandinavian Journal of Social Medicine, Supplementum* 43, The Almqvist & Wiksell Periodical Company, Stockholm, Sweden.
- Lin, N., Dean, A. and Ensel, W. M. (1981). 'Social support scales: A methodological note', *Schizophrenia Bulletin*, **1**, 73-89.
- Melville, D. I., Hope, D., Bennison, D. and Barraclough, B. (1985). Depression among men made involuntarily redundant', *Psychological Medicine*, **15**, 789-793.
- Ormel, J. and Schaufeli, W. B. (1991). 'Stability and change in psychological distress and their relationship with self-esteem and locus of control: A dynamic equilibrium model', *Journal of Personality and Social Psychology*, **60**, 288-299.
- Pelzmann, L. (1985). *Wirtschaftspsychologie (Economic Psychology)*, Springer Verlag, Vienna.
- Rotter, J. B. (1966). 'Generalized expectancies for internal versus external control of reinforcement', *Psychological Monographs*, **80** (whole No. 609), 1-28.
- Russell, D. W. (1982). 'The Causal Dimension Scale: A measure of how individuals perceive causes', *Journal of Personality and Social Psychology*, **42**, 1137-1145.
- Schaufeli, W. B. (1988a). 'Unemployment and psychological health: An investigation among Dutch professionals. Unpublished PhD thesis, University of Groningen, Department of Psychology.
- Schaufeli, W. B. (1988b). 'Perceiving the causes of unemployment: An evaluation of the causal dimensions scale in a real-life situation', *Journal of Personality and Social Psychology*, **54**, 347-356.
- Schaufeli, W. B. and Van Yperen, N. W. (1992). 'Unemployment and psychological distress among graduates: A longitudinal study', *Journal of Occupational and Organizational Psychology*, **65**, 291-305.
- Schwefel, D. (1986). 'Unemployment, health and health services in German-speaking countries', *Social Science and Medicine*, **22**, 409-430.
- Tiggeman, M. and Winefield, A. H. (1989). 'Predictors of employment, unemployment and further study among school-leavers', *Journal of Occupational Psychology*, **62**, 213-221.
- Ullah, P., Banks, M. and Warr, P. (1985). 'Social support, social pressures and psychological distress during unemployment', *Psychological Medicine*, **15**, 283-295.
- Vinokur, A., Price, R. H. and Caplan, R. D. (1991). 'From field experiments to program implementation: Assessing the potential outcomes of an experimental intervention program for unemployed persons', *American Journal of Community Psychology*, **19**, 543-562.
- Warr, P. B. (1984). 'Job loss, unemployment and psychological well-being'. In: Allen, L. V. and Van de Vliert, E. (Eds) *Role Transitions: Explorations and Explanations*, Plenum Press, New York, pp. 263-285.
- Warr, P. B. and Jackson, P. (1985). 'Factors influencing the psychological impact of prolonged unemployment and of re-employment', *Psychological Medicine*, **15**, 795-807.

- Warr, P. B., Jackson, P. and Banks, M. (1988). 'Unemployment and mental health: Some British studies', *Journal of Social Issues*, **44**, 47-68.
- Winefield, A. H. and Tiggeman, M. (1985). 'Psychological correlates of employment and unemployment: Effects, predisposing factors, and sex differences', *Journal of Occupational Psychology*, **58**, 229-242.
- Winefield, A. H., Tiggeman, M., Winefield, H. R. and Goldney, R. D. (1991). 'Social alienation and employment status in young adults', *Journal of Organizational Behavior*, **12**, 145-154.
- Winefield, A. H., Tiggeman, M. and Winefield, H. R. (1991). 'Attrition bias and internal validity in a longitudinal survey of youth unemployment', *Australian Journal of Psychology*, **43**, 69-73.