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THE QUALITY OF EMPLOYMENT IN THE CAREER OF YOUNG PSYCHOLOGISTS AND ITS IMPACT ON THEIR JOB- AND LIFE SATISFACTION

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This study has two purposes: The description of the career and the quality of work of young Flemish psychologists, and the study of the impact of underemployment on their job and life satisfaction. For skill utilisation we differentiate between utilisation of general skills generated by educational level — in this case university level —, and utilisation of specific skills generated by specialised training — in this case training as a clinical or organisational psychologist —. Many subjects suffered from unemployment and poor quality jobs during the 3 to 6 years period after graduation, but the quality of their employment improved with time. Subjects who were employed below their university-level, and — to a lesser extend — subjects with insecure jobs, manifested lower job- and life-satisfaction. Non-psychological or part-time work did not affect satisfaction-scores. A regression-analysis however indicated that the utilisation of specific psychological- as well as general university-level skills contributed to job satisfaction. But the impact of the type of skill utilisation differed depending upon the type of professional specialisation: Clinical or organisational.

Introduction

The economic crisis has put unemployment in the focus as the main problem to be studied and to be solved. Inspired by this preoccupation we undertook interdisciplinary research of unemployment of young (18 to 25 y.) job applicants (HIVA- stuurgroep,1986 and 1988). In accordance with many studies in Belgium and abroad the level of qualification proved the main differentiating variable in unemployment: The unqualified are highly overrepresented among the unemployed and stay significantly longer unemployed than their more qualified peers.

Recently, policy makers and researchers are loosing some interest in the problem of youth unemployment, because the trend of continuously increasing numbers of young unemployed reversed, at least in our country (De Witte & Holderbeke, 1989). But the reduction of the number of young unemployed does not apply to all categories. There

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remains a hard core of poorly qualified. Most of them do not profit from the improvement of the conditions of the labor market. One reason for this might be that the less qualified are pushed aside by the more qualified in the competition for jobs. As a consequence many qualified young employees are 'underemployed' and their knowledge and skills remain underutilised (O'Brien, 1986). This also applies to university trained young psychologists.

A lot of research has been done during the eighties about the psychological and social impact of unemployment (for a review, see Warr, 1983, 1984). We have to mention here the series of theoretically and methodologically innovative studies by the Social and Applied Psychology Unit of the University of Sheffield (Warr, 1987). Also Feather contributed by a series of studies. He published recently a summary of his extensive research-work related to the social consequences of unemployment (Feather, 1990). Compared to elaboration of the unemployment issue, research related to the psychological impact of underemployment is very scarce. One might consider it a luxury to focus on the quality of work when so many young people do not find jobs. But it is not correct to formulate the problem in terms of priorities, because unemployment and the quality of employment are closely related, as has been indicated above.

Review of the literature

Studies of the impact of underemployment are important because skill utilisation is closely related to satisfaction and also to mental health. O'Briens' review of the literature indicates that underemployment leads to lower job satisfaction and to poorer mental health, as measured by a composite of manifest anxiety, self-esteem, hostility and life-satisfaction (O'Brien, 1986 : 53-59). Skill-utilisation even proved to be the strongest predictor of job satisfaction in his own research. The results of Burris' small qualitative study of 32 low-level clerical workers with different educational backgrounds are in line with this: Those who were obviously underemployed showed increased job dissatisfaction, higher turnover rates and reduced job involvement (Burris, 1983).

A recent study from O'Brien and Feather (1990:151-165) illustrates the importance of skill utilisation for satisfaction and mental health. In a longitudinal study of school-leavers they studied the influence of the quality of employment on depressive affect, life satisfaction, external locus of control and feelings of competence (a measure closely related

to self-esteem). The results of this study prove that the positive benefits of employment for young people depend upon the quality of their employment. When school-leavers take jobs that underutilize their skills this affects negatively their psychological functioning: They become depressed, dissatisfied with life, feel less competent and more externally controled. The process is reversed when young people find jobs that match their skills: They improve on measures of affect and personal control. The longitudinal approach ascertains that the quality of the job influences the psychological functioning and not the other way around. Additional support for the validity of these results is given by the control of several relevant variables like the initial scores on the measures of affect and personal control, age, social class and academic potential. The importance of skill utilisation is emphazised by the fact that there was no substantial difference between becoming unemployed and taking employment in a poor quality job. Both groups were equally low in depressive affect, and personal control.

The conclusion that skill utilisation determines job satisfaction of employees also applies to youngsters in Belgium. In a recent study, the labor market position of youngsters with a general (non-technical) secundary degree diploma in the Flemish region of Beigium was studied (De Witte, 1990, b:85). 198 subjects, age about 21y, described job-characteristics and the level of satisfaction-dissatisfaction with several aspects of their worksituation. Approximately 75% of the respondents had a clerical job. In a regression-analysis 6 scales related to job characteristics were utilised as predictors of general job satisfaction, our criterion variable. The analysis indicated skill utilisation as the main determinant of job satisfaction (beta = .42). The contributions of other job characteristics as determinants of job satisfaction were rather limited: autonomy (beta = .22), time pressure: (beta = -.16), variety: (beta = .15). The characteristics 'physically exhausting' and 'complex and demanding' even proved irrelevant. All predictors together determined about 40% of the variance of the criterion variable ($R = .64$, $R^2 = .41$). This percentage increased by including in the analysis the degree of satisfaction with five job characteristics ($R = .75$, $R^2 = .57$). This second regression analysis also indicates an important impact of social relations in the work place on job satisfaction. Again skill utilisation came out as an important predictor of job satisfaction (beta = .25), on the same level as satisfaction with the relationship with the direct superior (beta = .25), with colleagues (beta = .24) and the

degree of job autonomy (beta = .22). Satisfaction about wages proved less important: beta = .15.

A similar analysis with a sample of 171 employees of the Louvain region in Flanders (De Witte, 1990, a) confirmed that satisfaction with wages was less important in determining 'global' job satisfaction than the degree of skill utilisation in professional activities. This sample was more heterogeneous than the sample mentioned earlier. It included blue collar and white collar workers with an age range from 28 to 45y. The same set of six scales to describe working conditions was used. We also included global job satisfaction and satisfaction concerning wages, own boss and colleagues. The results of the regression analysis are strikingly similar to these of the study mentioned above. As in the earlier study about 40% of the variance of job satisfaction can be explained by our set of predictors ($R = .64$, $R^2 = .42$). Again skill utilisation and relationship with colleagues prove the most powerful predictors: beta = .27 for both. Then comes satisfaction with wages (beta = .19), closely followed by satisfaction with own boss (beta = .18), and 'complex and demanding tasks' (beta = .15).

This review of the literature thus indicates the importance of skill utilisation as a determinant of job satisfaction. But this concept has to be specified for the purpose of the study reported in this article. Our study is limited to conditions of employment of young, university trained psychologists. Taking into account the high level of their educational training we have to differentiate between the level of their training and the specialisation. The level of their training refers to acquired general abilities, in this case abilities related to a university level education. These have to be differentiated from the level of general abilities acquired by non-university higher education or secundary education. In this case underemployment refers to non-use of general abilities related to a university-level training e.g., the capacity for problemsolving in situations that require abstract reasoning, capacities to deal with high levels of complexity, the autonomy and responsibility related to leadership.

The specialisation at the other side, or the discipline, refers to specific skills acquired by the training. In this study we thus evaluate the degree to which the job allows the utilisation of typical psychological skills e.g., diagnostic or therapeutic tasks. Requirements for these tasks differ from these for jobs of other university trained professionals like economists or medical doctors.

In studies concerning employment of university trained professionals, general (university-level) skills are rarely differentiated from specific skills. In most studies the respondents have only to answer the question whether he or she " needs their diploma to be able to do their job " (for a review of this type of studies, see: Letouche, 1989: 43-49). This type of questions is very ambiguous, because it remains unclear whether the respondent refers in his answer to the level of his employment or to the degree to which his employment corresponds to his specialisation. For that reason both aspects have to be studied separately. There is an additional advantage related to a differentiated analysis. It allows to specify the contribution of both aspects of skill utilisation to overall job satisfaction. For that reason we will differentiate the contribution of both aspects in determining job satisfaction.

SAMPLE AND QUESTIONNAIRE

We studied the quality of the employment of young psychologists who were 3 or 6 years on the labor market. We consider psychologists well suited to study the problem of underemployment because at the one hand they are highly qualified by their university training, and at the other hand there is a rather limited demand for their 'psychological' skills compared e.g., with the demand for technical or economic skills. We therefore expect that many of them will be obliged — at least at the start of their career — to accept qualitatively poor jobs, not adapted to their level and specific skills. We also want to study the impact of both aspects of underemployment on work- and life satisfaction.

In the beginning of 1988 a questionnaire was sent to all psychologists who qualified in 1982 and 1985 at one of the three universities of the Dutch speaking part of Belgium. By insisting we got a very high answer rate: 79,6% of the population. By disregarding the 16% we could not reach, we even got an answer rate of 95% of those who received our questionnaire. That means that we rather surveyed two populations than two samples.

Our respondents are equally distributed among male and female subjects. There are slightly more respondents who are 3 years on the labor market (175 qualified in 85) than those with 6 years (156 qualified in 82). By surveying these two groups we can compare the evolution of the career of two different generations of young psychologists. An interesting variable for our purposes is professional specialisation with

two main professional categories: clinical psychologists (74%) and work- and organisational psychologists (18%). A third variable with relevance for the professional career is the ranking according to the final grades of educational excellence: high (21%), middle (43%) and low (36%).

The questionnaire consisted of two main parts: 1. a detailed description of professional activities (career) since graduation, with an evaluation of qualifications needed to do the work (last job), 2. measurement of job- and life satisfaction. For the description of the career the respondents had to fill out a form specifying in chronological order all activities since graduation e.g., kind of job, periods of unemployment, further education or courses. We use this as a standard method in labour market research and it proved to be very reliable (see Bourdeaud'hui & Denys, 1986; De Witte, 1990, b). For every activity-item the respondent had to specify the duration: from...to. For every employment-item the quality of the contract had to be specified (see infra), the job content (function and description of activities), and the field of employment. An example illustrated this rather complex question. There was no need in this study for additional interviews to complete our data, since all questionnaires were very well completed. The quality of the responses might be due to the university level education of our subjects.

We will first report on employment and unemployment in the career of young psychologists and will then discuss the quality of their employment. In this discussion we differentiate between the quality of employment status (contract) and the quality of the work (content). The quality of the contract refers to permanent versus temporary work, and to full-time versus part-time work. Work quality refers to the level: university-level versus underemployment, and to the kind of work: psychological work versus non-psychological work. We finish by analysing the impact of the quality of employment upon the job- and life satisfaction of young psychologists.

EMPLOYMENT AND UNEMPLOYMENT

Nine out of 10 subjects were employed when they answered the questionnaire. Only 6% were unemployed, the remaining 3% were studying or doing household work. This rather favorable picture is misleading because it is static. It only shows that after 3 or 6 years only a small minority is still unemployed. When we analyse the process of

entering the labor market and of searching for a suitable job, we get a very different picture. It shows instability and mobility. Only 1 out of 5 subjects got a job immediately after graduation. The mean waiting time for the first job was seven months and three weeks (those who had to fulfill their military service not included).

It was harder for the 82-cohort to find a job than for the 85-cohort: a mean of 9.6 months of waiting against 6.4 months (military service not included). This reflects the evolution of the labor market which was more unfavorable for young job-applicants in 82 than in 85 (De Witte & Holderbeke, 1989 : 93-94). Subjects with unfavorable caracteristics had to wait longer for a job than their more favored colleagues: women had to wait 8.5 months (men 6 months), clinical psychologists 8.4 months (labor psychologists 4 months), and psychologists with low and middle grades longer than their high ranking colleagues: 9.8 and 7.7 months versus 4.3 months.

Mobility and instability were characteristic for the period after the start of the professional career. During a period of 6 years after graduation our subjects had a mean of nearly 3 different jobs (2.81) and were approximately 2 times unemployed (1.77).

Table 1. — *Employment and Unemployment for the 82 and 85 Cohorts*

	Total	1982	1985	*p*
Periods of employment	2.42	2.81	2.12	.001
Periods of unemployment	1.43	1.77	1.17	.000
Percentage of unemployment	23.9	19.8	27	.03

Note. Results refer to the total group of respondents. Percentages and means are specific for the two cohorts. The influence of the other variables (university, professional specialisation, gender and educational ranking) has been eliminated by Multiple Classification Analysis (Nie, et. al., 1975:410-418).

The proportion of unemployed time (see Table 1) is astonishing: A mean of one fifth for the 6 year period, and of more than one fourth (27%) for the 3 year period. But some categories suffer less from unemployment than others. According to the data of Table 2 labor psychologists have more job opportunities than their clinical colleagues, and psychologists with higher educational rankings more than their colleagues with lower rankings.

Table 2. — *Employment and Unemployment According to Professional Specialisation and Educational Ranking*

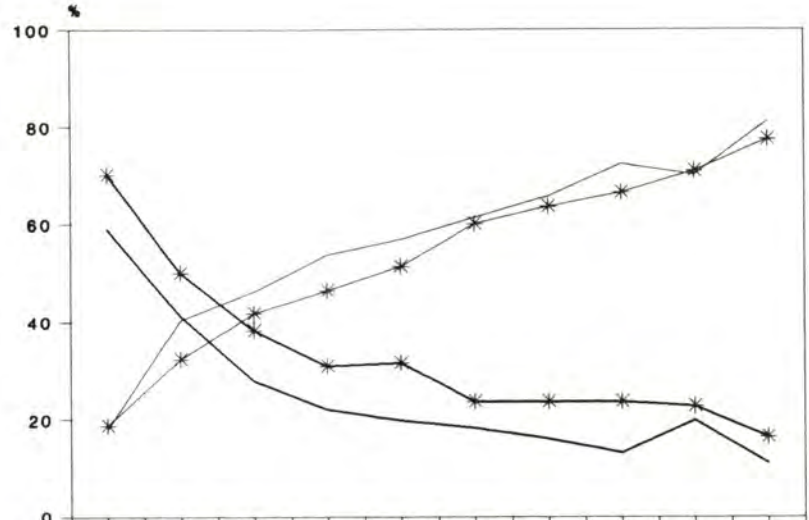
	Professional specialisation			Educational ranking			
	Labor	Clinical	*p*	Low	Middle	High	*p*
Number of periods of unemployment	1.04	1.53	.01	1.5	1.5	1.17	.21
Percentage of unemployment during the career	15.2	26.1	.008	27.3	26.3	13.3	.002

Note. Results refer to the total group of respondents. Percentages and means are specific for either professional specialisation or educational ranking. The influence of the other variables (university, gender, cohort (82 or 85) and either educational ranking or professional specialisation) has been eliminated by Multiple Classification Analysis.

Unemployment is neither evenly distributed over the 6- or 3-year careers but concentrated in the first period. That means that psychologists are gradually improving their position on the labor market. One month after graduation 64% were unemployed and only 19% had a job. Six months later the percentage of unemployed was reduced to half (32.6%) and then gradually went down to the 20% level at the end of the second year. The percentage of employed raised rapidly during the first 3 months (from 19% to 37%), to increase steadily afterwards at a 6% rate for every 3 months period (for a more detailed description of the employment pattern of the total group, see: De Witte & Lagrou, 1989: 113-115).

We have data to compare the evolution of the career of two generations of young psychologists: the 82 and the 85-cohort. Figure 1 shows the evolution of both cohorts. For both cohorts the percentages of employment and unemployment were computed for ten consecutive periods with three monthly intervals. The percentages of Figure 1 refer to all respondents of each cohort including those who were studying or fulfilling their military service.

We already mentioned that it is harder for the 82-cohort to find a job than for the 85-cohort, because the labour market was more favorable in 85. As shown in Figure 1 the difference between the two cohorts is maintained during their career. In every period less than 85 graduates are unemployed and a higher proportion is working. The differences between the percentages of unemployed are striking: In every period the 82-cohort has on the average 8,3 % more unemployed than the 85-cohort. Although differences diminish after 1 and 2 years, they remain



	1	4	7	10	13	16	19	22	25	28
Unemployed 82	70.1	50	38.2	30.9	31.5	23.6	23.6	23.6	22.7	16.4
Unemployed 85	59	41.2	27.9	22	19.7	18.2	16	13.1	19.7	10.9
Employed 82	18.7	32.4	41.8	46.4	51.3	60	63.6	66.4	70.9	77.3
Employed 85	17.9	40.4	46.3	53.7	56.9	61.3	65.7	72.3	70.1	81

Number of months after graduating

Figure 1. Evolution of percentages of employed and unemployed since graduation at ten three monthly intervals for the 82 and 85 cohorts.

significant: e.g., 5.5 % difference after 28 months. Differences are smaller for the percentages of employed: On the average 3,8 % more employed in the 85-cohort than in the 82-cohort, and differences shrink after one year.

Quality of employment status

We define quality of employment status in terms of the contract without taking into account the content of the work. For the quality of the contract we consider two criteria: job security and activity rate: full-time versus part-time work.

Job security

When answering the survey 2 out of every 3 working subjects (66,7%) had permanent work. One third of those with temporary work were integrated in government subsidized employment programs

(12,8%). The fact that one third of all young employed psychologists could only obtain temporary work 3 or 6 years after graduation, indicates their rather marginal position on the labor market. This percentage is significantly higher than the 21% of temporary work in the population of the 18- to 25-years old employees, including the unqualified (Vleminckx, 1988 : 105). A hypothetical explanation could be the lack of a well defined professional profile of psychologists in our society. That perspective makes it understandable that some employers take psychologists on probation to test their abilities before offering them a permanent job. Another explanation takes into account the fact that many psychologists are employed in the soft social welfare section, where job insecurity has to be taken for granted. Additionally this section suffers most when the goverment decides to reduce public spending, because their activities are almost exclusively financed by public funds.

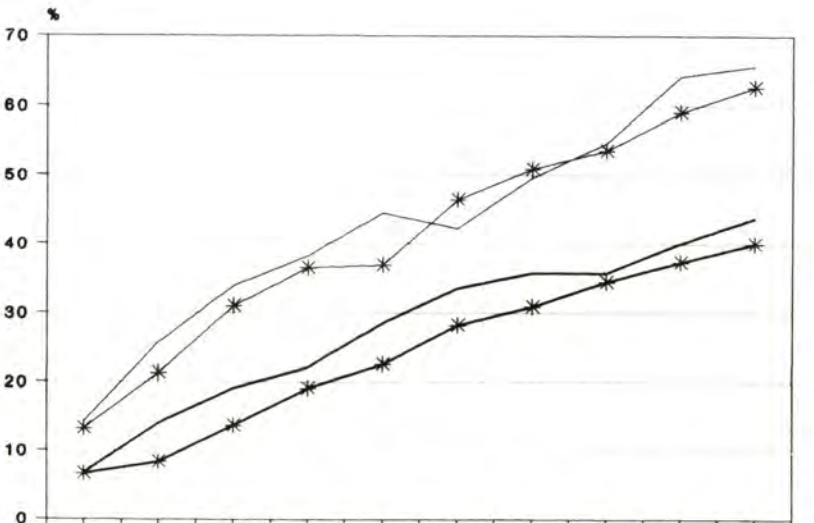
Activity rate

Contrary to job security the full-time versus part-time ratio of employed young psychologists is more favorable than the mean rate in the population of the young employed. Only 1 out of 6 psychologists were working part-time (16,2% — 9,7% of them working half-time) while in the population one fifth (21%) of the young were part-time employed in 1987 (De Witte & Holderbeke, 1989 : 100). Two subject variables are influencing the quality of the contract: gender and professional specialisation. Three female psychologists are part-time working for one male (25% versus 9%). This is also the case in the population of young employees. The job security of women is also slightly lower than that of men. The variable professional specialisation also shows significant differences for both criteria. Labor psychologists have significantly more full-time work than their clinical colleagues: 96% versus 80%, and they have significantly more permanent work: 83% versus a poor 63% for clinical psychologists.

The evolution of the quality of employment status during the first 28 months after graduation demonstrates that most young graduates have to try continuously during a rather long period to upgrade the quality of their contract before they reach an acceptable level of employment (for a detailed description, see: De Witte & Lagrou, 1989: 115-117). It takes approximately two years after graduation before a majority of our subjects become full-time employed. This proportion is slowly and gradually increasing from 14% in the first period to 64% at the 28th

month. The curve of permanent work shows a similar evolution. But this curve is situated well below the full-time job curve. Job security is even harder to obtain than full-time employment. So after 28 months the permanently employed are still a minority of 42%. Only after 3 years is there a majority of 60% with permanent jobs, against 40% of psychologists with temporary work; and after 6 years 74% are permanently employed against 26% temporarily. This means that full-time and permanent work is no longer evident for psychologists who start their professional work in the late eighties, while this was evident in our country in the golden sixties and even in the seventies.

Differentiating for the two cohorts Figure 2 shows that the quality of employment is better for the 85-cohort. Percentages of Figure 2 refer to all respondents of each cohort including those studying or fulfilling their military service.



	1	4	7	10	13	16	19	22	25	28
Permanent 82	6.6	8.3	13.6	19.1	22.5	28.2	30.9	34.5	37.3	40
Permanent 85	6.7	14	19.1	22.1	28.5	33.6	35.8	35.8	40.1	43.8
Full-time 82	13.2	21.3	30.9	36.4	36.9	46.4	50.9	53.6	59.1	62.7
Full-time 85	14.2	25.7	33.8	38.2	44.5	42.3	49.6	54.7	64.2	65.7

Number of months after graduating

Figure 2. Percentages of full-time and permanently employed psychologists at ten three monthly intervals for the 82 and 85 cohorts.

The cohorts differ most for job security. In nearly all periods more 85-cohort subjects have permanent jobs than their 82-cohort colleagues (mean difference of 7.7 %). The diffence diminishes after two years but does not disappear. Differences concerning activity rate are small and whimsical. On the average 85-cohort subjects have slightly more full-time work than their 82-cohort colleagues (mean difference of 1.2 %), but this is not always the case (not after 16 and 19 months). It might be that for our subjects full-time work is less determined by conditions of the labour market then by their personal preferences (see later).

QUALITY OF WORK

With work quality we refer to the content, to the degree to which tasks utilize subject's resources and skills and correspond to their expectations. To operationalize skill utilisation for psychologists we use two requirements: 1. the requirement of general knowledge and skills related to university level education and training; 2. the requirement of specific knowledge and skills related to the training of a psychologist. The combination of these two criteria results in the 4 categories mentioned in Table 3.

Table 3. — *Distribution of Young Psychologists over Four Categories According to the Level and the Qualification Required by the Job*

Quality of work	Percentage of employed psychologists	
1. Psychological work on university level	60.5	
2. Non-psychological work on university level	15.8	
3. Psychological work on a lower level	3.6	
4. Non-psychological work on a lower level	20.1	(10.9)
		(9.2)

To refer subjects to these categories we utilised data generated by their answers to the following questions: "Give a full description of your actual job, the content of your work, and a description of your activities" and "What kind of qualifications (diploma's) are required for your work, according to your own judgement?" Two independent judges classified the answers in the categories mentioned above. Both judges agreed in 86% of the cases (kappa-interjudge reliablity of .80). The cause of disagreement was always related to ambiguous criteria, e.g., is a teaching-job in a secundary school university level work, or is

non-university higher education more indicated in this case? As a consequence, the criteria were uniformized.

Seventy-six percent of our respondents were working at a level that required a university education, and most of them did psychological work. We have to take into account that these data refer to the situation after 3 or 6 years. Nearly one fourth (23.7%) of our respondents are underemployed, what proves that there is a serious problem. Unfortunately we cannot compare our data to results of comparable studies or to characteristics of the population. It might be typical for our country that very few young psychologists are employed under university level for jobs that require psychological skills: only 3.6%. This market is very well protected by psychological assistants, social workers and social nurses.

The tasks of underemployed respondents in the 4th category of Table 3 are very diverse. About half of them require some skill and responsibility as selfemployed shopkeeping, or working as sales representative. But nearly 10% of our young university graduates are performing routine jobs such as typist, assembly-line worker and warehouse-clerk.

Quite understandably educational ranking proved a very significant ($p = .002$) subject variable — the only significant one — for work quality. Those with the highest educational rankings have the best chances to obtain work at a university level: 93% of the high, 74% of the middle and 68% of the low rankers got university level jobs.

We have general indications about the evolution of work quality for our subjects. As we could expect there is an improvement in work quality during the 3 to 6 year careers. One fifth of our subjects raise from a non-university to a university level job. But there is no such evolution for the discipline. There even is a tendency in the opposite direction: psychologists shifting from psychological to non-psychological work.

Table 4. — *Evolution of the Quality of Work from First to Last Job (in Percentages)*

Qualification level	Stayed the same	Lower	Higher
	71.4	8.6	19.9
Discipline	Same discipline	Moved away from own	Moved to own
	73.6	15.1	11.2

This result casts some doubt on the relevance of own discipline as a criterion for work quality. Some psychology graduates might even consider it a promotion to move out of their own discipline. To check this we have to analyse the relationship of our criteria of employment status and work quality with measurements of work- and life-satisfaction.

QUALITY AND SATISFACTION

In this study work satisfaction has been measured by using a scale of 6 items e.g., the item : "I am enthousiastic about my actual work". The scale is very reliable: alpha = .89. The items were scored on a 5-point scale varying from 1 (disagree) to 5 (agree). Life satisfaction was measured by using the item: "I am satisfied about my life as a whole", answers varying from 1: not at all satisfied, to 7: totally satisfied (see Appendix).

The impact of the four quality criteria on satisfaction

Table 5 gives an overview of the relationships with work- and life satisfaction of the four quality criteria: full-time versus part-time, permanent versus temporary employment, university versus non-university, and psychological versus non-psychological work. We take into account three levels of employment: the university level, the (non-university) higher education level and the higher secundary education level (comparable to the U.K. O-levels). We started with an analysis of variance with satisfaction scores as dependant variables and university, gender, cohort, educational ranking and professional specialisation as independant variables. Professional specialisation was the only variable with a significant relationship with job satisfaction: Work psychologists were more satisfied with their work than clinical psychologists. This higher level of satisfaction has to be attributed predominantly to job security because significantly more work psychologists have permanent contracts. We did not take professional specialisation into account because this variable does not contribute directly to job satisfaction. We checked this by an analysis of variance in which we added professional specialisation as a fifth independant variable to the four quality criteria of Table 5. This fifth variable did not contribute, and was not included for that reason in the final analysis reported in Table 5. We have to specify that the data in this table have not been controlled for the influence of university, gender, cohort, educational ranking and

professional specialisation. We considered this unnecessary because these variables did not affect directly the job satisfaction scores.

Table 5. — *Relationship of the Four Quality Criteria with Work- and Life Satisfaction Scores*

Quality criteria	Work satisfaction (a)	Life satisfaction (b)
Activity rate		
full-time working	3.55	5.35
part-time working	3.75	5.45
p	(.13) n.s.	(.64) n.s.
Job security		
permanent contract	3.71	5.46
temporary contract	3.34	5.19
p	(.001) s.	(.11) n.s.
Required level		
university level	3.72	5.52
non-university higher education	3.52	4.97
secundary education	2.36	4.6
p	(.000) s.	(.006) s.
Required training		
psychological	3.58	5.28
non-psychological	3.58	5.55
p	(.99) n.s.	(.19) n.s.
Overall mean score	3.58	5.37

Note: The results are based on the answers of respondents who were employed at the time of the survey (march 1988). The mean scores are specific for one variable. For every variable the influence of the others has been eliminated by means of Multiple Classification Analysis.

(a) The scale varies from 1: fully disagree to 5: fully agree, with 3 as a neutral mean.

(b) The scale varies from 1: very dissatisfied to 7: very satisfied, with 4 as a neutral mean: neither satisfied, nor dissatisfied.

Two criteria have significant relationships with satisfaction scores: job security and required level.

Required level as a determinant of satisfaction

Required level seems the most powerful determinant of satisfaction. It has strong significant relationships with both work- and life satisfaction scores. Respondents employed on the university level obtain the highest satisfaction scores. The middle group (non-university higher education level) with a lower mean score is nevertheless situated at the

positive side of the satisfaction scale. This is not the case for the group with the highest level of underemployment: Their mean score is situated at the negative side of the work satisfaction scale. They are unhappy about their work, but not about their life: Although they obtain the lowest life satisfaction score, their mean score is still situated at the positive side, above the neutral mean of the scale.

Quite strikingly there is no relationship at all with the other work quality criterion: required training. This corresponds to a tendency we mentioned before. It seems that most of our psychologists strive for upward mobility and they might be satisfied when they reach their level in jobs that they perceive as requiring a university training. Asking for specific psychological work might even interfere with continued upward mobility, because management work seems more related to law and economy than to psychology.

Job security as a determinant of satisfaction

Job security is also significantly related to work satisfaction, with higher satisfaction scores for those with permanent jobs. For life satisfaction there is no significant difference but a tendency in the expected direction.

Part-time work and satisfaction

In general our part-time employed respondents do not seem particularly unhappy. One reason might be that some psychologists prefer part-time employment, among them married female psychologists who have to combine their professional work with domestic chores. Only 16% of our employed respondents are still working part-time 3 or 6 years after their graduation. The number of part-time working respondents remains rather stable over time varying between 12% and 16% after the first four months of graduation.

Further analysis of the impact of underutilisation of specific (psychological) skills

We were puzzled by the lack of a significant relationship between the psychological content of the job and job satisfaction in the initial analysis of the data, because it seems evident that psychologists want to practice the psychological knowledge and skills they acquired by a five year university training. When young psychologists do not get the opportunity to practice their skills we expect frustrations lowering their job satisfaction.

We now speculate that our method of data gathering might have been partially responsible for this lack of relationship between psychological skill utilisation and job satisfaction. In categorising jobs as psychological or non-psychological we were very restrictive. We considered a job only as psychological when the respondent described his work explicitly as psychological, e.g., training and selection of personnel or psychotherapy. But we did not take into account to what degree our respondents felt that they could utilize specific psychological skills in a job categorised as non- psychological., e.g., communication skills in a managerial job. As a consequence subjects might experience ample opportunities to utilise their psychological skills acquired by their university training in jobs that we considered as non-psychological. For these subjects a non-psychological job did not reduce job satisfaction. For that reason we proceeded to test the hypothesis of the impact of (under)utilisation of psychological skills on job satisfaction by analysing respondents' subjective evaluation of skill utilisation in their job.

Two measures of skill utilisation were used as predictors of job satisfaction in a regression analysis. The first measure is the university level scale, composed of 3 items referring to the degree to which the subject perceives his job as requiring university-level skills: e.g., "a university diploma is a necessary condition for performing well in my job". The second measure is the psychological work scale, composed of 5 items referring to the degree to which the subject perceives his job as requiring specific psychological skills: e.g., " My job offers me ample opportunities to utilize my specific psychological skills". All items had identical 5-point scale answer categories. The two scales are very reliable (alpha = .88).

Next to the regression analysis for the total group, separate regression analyses were performed for two professional subgroups: the labor- and the clinical psychologists. We analysed the data for these groups separately because it is reasonable to expect that the psychological-work-variable will be more powerful in predicting job-satisfaction for clinical psychologists than for labor psychologists, because jobs of clinical psychologists are more homogeneously psychological, e.g., psychotherapy, while labor psychologists are more engaged in interdisciplinary work, e.g., training of young employees. The results of the analyses are presented in Table 6.

Table 6. — *Required Level and Required Training as Predictors of Work Satisfaction of Psychologists*

	Original r*	Beta coefficient	*p* (beta)	R	R^2
Total group				.52	.265
– university level work	.47	.32	.001		
– psychological work	.45	.25	.001		
Work psychologists				.47	.22
– university level work	.47	.47	.001		
– psychological work	.31	—	—		
Clinical psychologists				.53	.28
– university level work	.46	.25	.01		
– psychological work	.51	.36	.001		

Note: results of a regression analysis (forward inclusion of variables).
*all corrections are highly significant ($p < .001$), except for .31 ($p < .05$).

The correlations of Table 6 indicate that both measures of skill-utilisation contribute significantly to the job satisfaction of employed psychologists. The impact of both variables is considerable because together they cover more than a quarter of the variability of job satisfaction ($R^2 = .265$). The perception of utilisation of specific psychological skills is on itself contributing to job satisfaction although to a lesser degree than the perception of utilisation of general skills (university training): beta of .25 versus .32. The results for the two professional groups separately are in line with our expectations. For work psychologists only general skill utilisation (university level) contributes significantly to job satisfaction: beta = .47. This can be explained by the multi-disciplinary nature of their work. Next to their own discipline work psychologists have to familiarize themselves with knowledge and skills related to economy, law and sociology. These additional requirements reduce the importance of the contribution of their own discipline. Compared to their work-psychology colleagues clinical psychologists work in a different setting. There can be no doubt about the importance of specific psychological skills for clinical work. This can explain the importance of specific psychological skill utilisation for the job satisfaction of clinical psychologists: beta = .36 (.13 for work psychologists). Although less important, general skill requirements (university level) also contribute to job satisfaction: beta = .23 (.47 for work psychologists).

Conclusion

In theory and research concerning underemployment the utilisation of general skills is rarely differentiated from the utilisation of specific skills. From our research results we can conclude that this differentiation is necessary at least for the study of skill utilisation in higher professions.

Our empirical data emphasize the overall importance of the utilisation of general skills for the job satisfaction of psychologists. When psychologists are employed under their university level there is a negative impact not only on their job satisfaction but also on their life satisfaction. Research on the psychological impact of precarious forms of work should therefore also pay attention to skill utilisation and underemployment. The impact of the utilisation of specific skills is more limited but nevertheless substantial. The impact is especially important for clinical psychologists because specific psychological skills are important for their training and job.

Also job security contributed to job satisfaction, but not to life satisfaction. It might be that job security becomes more important at a later stage in the career. Our research focused on young psychologists trying to conquer a position on the labor market. Securing and stabilizing that position might become a central preoccupation at a later stage in their career.

A practical conclusion from our study is that there should be regular survey research about the quality of employment of professional psychologists in general and of the younger generations in particular. This should be considered as a priority by professional organisations of applied psychology. As a matter of fact these organisations in collaboration with centers for professional training of psychologists, have to take care of the promotion of the profession. To do so, they have to stay informed by regular diagnostic research.

Efforts have to be made to study the quality of employment of psychologists by direct analysis of the tasks performed by them, and by studying skills involved in these performances. Our approach: Asking psychologists to evaluate their own job, can only result in a rather global and somewhat biased diagnosis.

The diagnosis we offer might for some aspects be specific for our country but the main findings can be generalised to most Western European psychologists. This might also be the case for the rather favorable position of labor and organisational psychologists on the

labor market. As a consequence the number of students choosing this specialty is raising, and the number of candidates for clinical or therapeutic work diminishing.

There is nothing wrong with that at first sight, except that labor psychologists move easily from psychological to other work. Clinical psychologists are closer to the discipline, more loyal to psychology. This loyalty of young psychologists to the discipline is important at a time when our young profession is fighting for recognition. High quality employment for psychologists could promote loyalty and contribute to a favorable profile of the psychological profession in modern society.

APPENDIX

SCALES AND ITEMS: PERCEPTION OF EMPLOYMENT

1. *Psychological work (related to specialisation of training and education).*

(Cronbach's alpha = .88)

21. My job corresponds to my specialisation (labor-, clinical...) in psychology.
(-)34. My psychological training does not contribute to the quality of my professional work.
51. For the work I do you have to be a psychologist.
56. In my job I can utilise my professional psychological skills.
(-)60. In my work I can insufficiently use my psychological training.

2. *Work corresponding to a university degree.*

(Chronbach's alpha = .88)

14. A university diploma is required to meet the standards required for my work.
(-)26. An employee without university training can perform in my job as well as I do.
(-)54. My job is below the university level.

3. *Job satisfaction.*

(Chronbach's alpha = .89)

(-)28. I consider leaving my job and to look for other work.
35. I am very pleased with the work I do.
46. The work I do is relevant.
53. My job is very satisfying.
57. I feel much engaged in my job.
(-)58. I resent the content of my work

note: All these items were scored on a 5-point scale, ranging from: 1 (strongly disagree), to 5 (strongly agree). For the items with (-) the scoring was reversed. The numbers refer to the position of the items in the questionnaire.

4. *Life satisfaction.*

"I am satisfied with my life as a whole": scored on a 7-point scale.

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