



Measuring job satisfaction in surveys: The Netherlands

Comparative analytical report

Questionnaire

Editorial disclaimer

This report has not been subjected to the standard Foundation editorial procedures

This national report from the Netherlands is part of a comparative overview ([EF/06/55/EN](#)) of how job satisfaction is measured in national working conditions surveys based on 16 national contributions for the [European Working Conditions Observatory](#) (EWCO).

Aim and structure of the comparative analytical report questionnaire

The main objective of this comparative analytical report is to assess if and how the job satisfaction issue is dealt in the national surveys and to bring forward some data and trends on job satisfaction. This comparative analytical report shall reveal how national surveys produce data on job satisfaction, focusing on the methodologies used and shall present available data on job satisfaction.

Thus, the questionnaire is divided into three main sections. The first section is mainly focused on the national surveys dealing with job satisfaction (priority given to the national working conditions surveys) and the methodological frame used. In this section, the national correspondents are basically asked to identify which surveys deal with job satisfaction, what questions are made, how questions are made and what definitions are used in those questions.

The second section is addressed to gather available data on general job satisfaction and job satisfaction broken down by some of its determinants. Whenever it is possible, trends should be identified.

Finally, the last section is focused on the analytical aspects of job satisfaction. In this section, national correspondents are asked to identify correlations between job satisfaction and other variables related to organisational practices that may be present in national surveys data reports and to identify interesting pieces of conceptual or meta analysis of job satisfaction.

Section 1: Survey sources and questions

Question 1.1: Is job satisfaction an issue addressed in your national working conditions surveys? Do other national surveys include any questions on job satisfaction?

Please identify sources and survey methodology (also mention first year of implementation, regularity (periodicity), time frame (e.g. over the last twelve months), population, sample size and frame, data collection methodology, etc.).

The Central Bureau of Statistics in the Netherlands monitors working conditions and aspects of health in the 'Living Conditions Survey' since 1977. Since 1989 this survey has been carried out on a yearly basis (instead of every three years). In 1997 this survey became integrated in the Permanent Quality of Life Survey (Permanent Onderzoek Leef Situatie; POLS); an integrated system of surveys consisting of a core module which is administered to a random sample of people who have a registered address in the Netherlands. Since then, every year between 40,000 and 90,000 people are addressed with a response approximately between 50% and 60%. The additional module on working conditions and health is administered to only a part of the sample, namely 18,500 workers. Here, the response is about 60% on average (a total of about 10,000 working people each year). Every year there are about 4,500 workers in the age of 18 to 64 years, and this sample is representative for the Dutch workforce. In 2003 many and in 2004 all questions on working conditions were left out the POLS. The data are collected with computer assisted personal interviews (this counts for the basic module and questions on working conditions) and with paper questionnaires people had to fill in and send back later (only the questions on health). For a brief overview regarding the Permanent Quality of Life Survey see table 1. More information can be found on the website of the Dutch Central Bureau of Statistics: <http://statline.cbs.nl/StatWeb/Start.asp?lp=Search/Search&LA=EN&DM=SLLEN>

TNO Working Situation Survey (TAS)

The TNO Working Situation Survey (TNO Arbeid Survey; TAS) is a two yearly survey carried out by TNO Work and Employment since 2000. This survey contains questions regarding quality of work and employment and labour market related topics. The survey is administered to people who are part of the Dutch workforce. At the moment data are available for the years 2000, 2002 and 2004. For each of these years the net response is between 4,000 and 5,000 workers, and the net response percentages vary from 45% to 50%. The samples are representative for the Dutch labour force in the age of 15 to 64 years. People addressed have the choice to fill in a paper version or a web version of the questionnaire (see table 1). More information (in Dutch) about the TNO Working Situation Survey can be found on the following website: www.tno.nl/tas.

Netherlands Survey on Working Conditions (NEA)

Since 2003 TNO Work and Employment carries out the Netherlands Working Conditions Survey (Nationale Enquête Arbeidsomstandigheden; NEA) which is meant to replace the working conditions questions in the POLS. The NEA started as a two yearly survey, but probable will become a yearly survey from 2005 onwards. At the moment data are only available for the year 2003. In that year 23.000 employees received a postal questionnaire and additionally 900 employees received a mail with the request to fill in a web version of the questionnaire. The net response was 42% (= 10,075 employees). This sample is representative for the Dutch labour force

in the age of 15 to 64 years, excluding the self-employed (see table 1). For more information (in Dutch) you can visit the website: www.tno.nl/nea.

Table 1: Surveys on working conditions in the Netherlands

	Permanent Quality of Life Survey	TNO Work Situation Survey	Netherlands Working Conditions Survey
Acronym	POLS	TAS	NEA
Sample size	10.000 (Module Health & Working Conditions); approx. 4.000 workers	4.000	10.000 (2003) 25.000 (2005)
Since	1977	2000	2003
Response rate	60%	45%-50%	40%-45%
Frequency	Every third year for 1977-1989; Annual since 1989 (trend break in 1994); Continuous data-collection (whole year through) since 1997	Biennial (autumn)	Annual from 2005 (autumn)
Method	CAPI (face to face interviews) PAPI (postal questionnaire)	PAPI (postal questionnaire) CAWI (web interviewing)	PAPI (postal questionnaire) CAWI (web interviewing)
Sample	Representative sample of the Dutch population	Representative sample of the Dutch Labour Force (15-64)	Representative sample of the Dutch Labour Force (15-64), excluding self-employed
Coordination	Statistics Netherlands (CBS)	TNO Work & Employment	TNO Work & Employment

Source: Houtman, I & Bossche, S van den (in press). Trends in quality of work in the Netherlands

Question 2. The questions regarding job satisfaction in national surveys are single-item questions? Or multi-facet questions? Are there ‘indirect’ job satisfaction questions in the survey, e.g. scale questions of the type ‘Your job gives you the feeling of work well done’?

Please specify how questions are formulated (i.e. the text of the questions used in the surveys) and, if applicable, identify different facets used.

If possible, briefly mention the evolution in questions used in national surveys: which questions were added, which questions were removed, etc.

Is there a scale being used? What kind of scale?

Information from the POLS questionnaire:

One question in this national survey is a single-item, overall question relating to general satisfaction with work. The other items are multi-facet items relating to satisfaction with specific aspects of work. In general, the concepts in the POLS are measured with single items and not with scales. Over the period 1997-2002 the questions on job satisfaction have not been changed. In 2003 the items on opportunity to develop one's talents and good fit between work and education/experience have been skipped.

POLS- Do you enjoy your work? (wrkpleop)

- yes, frequently
- yes, occasionally
- no

POLS - Are you content with the management? (tevrleid)

- yes
- no

Information from the TAS questionnaire:

Item 74 in the TNO Working Situation Survey is a single-item question regarding general satisfaction with work. The other items (47 a to 47 e) multi-facet items measuring the degree of satisfaction with specific aspects of work. Item 47e was added in 2002.

In this survey, the single item on general job satisfaction is highly associated with two other items regarding the involvement with the organisation: 'I feel perfectly at home in this organisation', and 'Compared to most other organisations, it is very attractive to work for this organisation', both with five answering categories varying from 'totally agree' to 'totally disagree'. The Cronbach alpha of this 'scale' is good: $\alpha = 0.80$. This 3-item 'scale' can have a range of 3 to 15, with a lower score meaning people are more satisfied with their work, and a higher score meaning that people are less satisfied with their work.

TAS-74 Taken all together, to what extent are you satisfied with your work?

- very dissatisfied
- dissatisfied
- not satisfied / not dissatisfied
- satisfied
- very satisfied

TAS-47 To what extent are you satisfied or dissatisfied with the following aspects at your work?

a. Payment policy at your company/organization

b. Career, promotion and policy

c. Absence policy

d. Education/training policy

e. Working conditions policy

- very dissatisfied
- dissatisfied
- not satisfied / not dissatisfied
- satisfied
- very satisfied

Information from the NEA questionnaire:

There is one item in this survey relating to general job satisfaction. This item is no part of a scale.

NEA - 33. You have answered quite a lot of questions about your working conditions: the conditions at your work which determine if you can do your work in a safe and healthy way.

In general, to what extent are you satisfied with your working conditions?

- Very dissatisfied
- Dissatisfied
- Not satisfied / not dissatisfied
- Satisfied
- Very satisfied

Question 3 If definitions of overall job satisfaction/job satisfaction facets are used in questions in national surveys, please give them.

In the Netherlands no definitions on overall job satisfaction or job satisfaction facets are used in the questions in the national surveys.

2. Survey data and trends

Question 4 Provide data, including trends if possible, on general job satisfaction.

When we look at the POLS data we can see that there are hardly any changes over the period 1997 to 2003 in the extent to which people enjoy their work (see tables 2 and 3). More than 90% of all workers frequently enjoy their work.

Table 2: Trends in job satisfaction on the basis of the POLS data (frequencies)

Do you enjoy your work?	1997	1998	1999	2000	2001	2002	2003
1 Yes, frequently	91%	92%	92%	92%	92%	92%	93%
2 Yes, occasionally	6%	6%	6%	5%	5%	5%	5%
3 No	3%	2%	2%	2%	3%	2%	2%

Table 3: Trends in job satisfaction on the basis of the POLS data (mean scores, standard deviation, and number of respondents)

Do you enjoy your work?	1997	1998	1999	2000	2001	2002	2003
Mean	1.11	1.09	1.11	1.10	1.10	1.10	1.10
SD	0.392	0.352	0.375	0.375	0.380	0.368	0.365
N	4651	4095	4442	4532	4483	4509	4503

When we look at the data from the TAS, we do see some small but significant differences (see tables 4 and 5). In 2000 workers are more often neither satisfied nor dissatisfied with their work and less often satisfied with their work compared to workers in 2002 and 2004. Also, the average score on the job satisfaction variable is lower in 2000 compared to 2002 and 2004. But also in the TAS the majority of the workers are – taken all together – (very) satisfied with their work.

Table 4: Trends in job satisfaction on the basis of the TAS data (frequencies)

Taken all together, to what extent are you satisfied with your work?	2000	2002	2004
1 Very dissatisfied	2%	2%	2%
2 Dissatisfied	4%	4%	4%
3 Not satisfied / not dissatisfied	20%	14%	15%
4 Satisfied	58%	62%	64%

Taken all together, to what extent are you satisfied with your work?	2000	2002	2004
5 Very satisfied	17%	18%	16%

Table 5: Trends in job satisfaction on the basis of the TAS data (mean scores, standard deviation, and number of respondents)

Taken all together, to what extent are you satisfied with your work?	2000	2002	2004
Mean	3.84	3.90	3.89
SD	0.81	0.801	0.777
N	4312	3998	4823

Please also provide the latest data available on the following possible job satisfaction correlates: gender, age (use, if possible, the Labour Force Survey age classes: 15 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64 and 65 years old or more), marital status, parenting/number of children, education, job status (permanent/fixed-term, employee/self-employed, full/part-time), occupational background (current job), and sector of employment/major industry (use, if possible, the standard NACE classification, 1 digit).

First we look at the POLS 2003 data, where general job satisfaction is measured with the single item question ‘Do you enjoy your work?’.

We compared the mean scores on job satisfaction between the different subgroups (one-way ANOVA) In this way some small but significant differences between the subgroups became apparent (see table 6). Some interesting differences are:

- Workers in the youngest age group (15-24 years) are relatively less satisfied with their jobs compared to the other age groups.
- Divorced workers and workers who never got married are less satisfied with their job compared to married workers. The number of widowed workers (n=46) is rather small and therefore the differences with the other subgroups are not significant although the widowed workers are relatively more satisfied with their job.
- Workers with a higher education are relatively more satisfied with their job compared to workers with a lower education.
- Self-employed are more satisfied with their job than employees
- People working in elementary and lower professions are less satisfied with their job compared to people working in secondary, higher and academic professions.
- Workers in the sectors industry and trade are somewhat less satisfied with their job, while workers in the sectors building & construction industry , health care and education are somewhat more satisfied with their jobs.

Regardless of these differences, in general all subgroups frequently enjoy their work.

Table 6: Mean scores of different subgroups on the variable job satisfaction based on the POLS 2003 data

		Do you enjoy your work? (1= yes, frequently – 3=no)		
		Mean	N	SD
Totaal		1.10	4503	0.365
Sex	Male	1.09	2629	0.363
	Female	1.10	1874	0.367
Age (in 5 categories)	15-24 years	1.14	576	0.442
	25-34 years	1.08	1212	0.337
	35-44 years	1.10	1273	0.366
	45-54 years	1.09	1035	0.360
	55 years and older	1.08	404	0.329
Marital status	Married	1.08	2451	0.343
	Divorced	1.14	316	0.422
	Widowed	1.03	46	0.164
	Never married	1.11	1691	0.387
Number of children	No children	1.10	1830	0.367
	1 child	1.10	943	0.359
	2 children	1.10	1149	0.377
	3 or more children	1.08	521	0.337
Education level	Primary education	1.13	390	0.424
	Lower vocational education	1.11	603	0.397
	Lower general secondary education	1.15	364	0.437
	Higher general secondary education, pre-university education, intermediate vocational education	1.09	1811	0.358
	Higher vocational education, university	1.07	1317	0.310
In employment/self-employed	In employment	1.10	4056	0.373
	Self-employed/working in a	1.06	447	0.272

		Do you enjoy your work? (1= yes, frequently – 3=no)		
		Mean	N	SD
	family business			
Fulltime/part ime contract	Part ime (<36 hours/week)	1.10	1696	0.371
	Fulltime (36 hours/week or more)	1.09	2802	0.361
Professional group	Elementary professions	1.24	280	0.591
	Lower professions	1.12	1078	0.408
	Secondary/middle professions	1.08	1664	0.328
	Higher professions	1.06	1177	0.289
	Academic professions	1.07	246	0.314
Sector	Agriculture and fishery	1.10	123	0.368
	Industry	1.13	491	0.427
	Building & construction industry	1.06	316	0.281
	Trade	1.12	518	0.410
	Hotels and restaurants	1.10	125	0.359
	Transport and communication	1.10	228	0.396
	Financial services	1.08	152	0.324
	Business services	1.10	437	0.377
	Government	1.10	328	0.375
	Education	1.07	299	0.263
	Health care and Welfare work	1.06	751	0.310
	Culture and other services	1.10	183	0.402

When we look at the mean scores of the different subgroups on job satisfaction in the TAS 2004(see table 7), we see some small but significant differences between the subgroups:

- Female workers are more satisfied with their jobs compared to male workers.
- The workers in the two oldest age groups (45-54 years, and 55 years and older) are more satisfied with their work compared to the younger age groups.
- Workers who never got married are less satisfied with their job compared to married and widowed workers.
- Workers with no (completed) education are relatively low on job satisfaction compared to workers with education.
- Temporary workers and employers with a temporary contract are less satisfied with their job, while freelancers and self-employed are very satisfied.

- People working in other professions, such as teachers or managers, or in agricultural professions are relatively more satisfied with their job as compared to people working in crafts or industrial professions and people working in transport.
- In the sectors government and education, employees are relatively more satisfied with their job. Workers in the sectors business services, hotels and restaurants, and electricity and water companies are relatively low on job satisfaction.

Despite these differences in general all subgroups are satisfied with their work.

Table 7: Mean scores of different subgroups on the variable job satisfaction based on the TAS 2004 data

		Taken all together, to what extent are you satisfied with your work? (1=very dissatisfied – 5=very satisfied)		
		Mean	N	SD
Total		3.89	4823	0.777
Sex	Male	3.87	2690	0.788
	Female	3.91	2133	0.762
Age (in 5 categories)	15-24 years	3.83	759	0.799
	25-34 years	3.85	1180	0.817
	35-44 years	3.89	1301	0.745
	45-54 years	3.93	1087	0.761
	55 years and older	3.95	472	0.754
Marital status	Married or cohabiting	3.91	3410	0.772
	Divorced	3.87	227	0.766
	Widowed	4.04	69	0.706
	Unmarried	3.81	1098	0.793
Number of children living at home	1 child	3.88	837	0.806
	2 children	3.90	1314	0.774
	3 children	3.92	392	0.780
	4 or more children	3.99	97	0.599
Education level	No (completed) education	3.52	46	0.684

		Taken all together, to what extent are you satisfied with your work? (1=very dissatisfied – 5=very satisfied)		
		Mean	N	SD
Type of employment	Primary education	3.95	278	0.819
	Lower general or vocational education	3.92	1027	0.762
	Intermediate general or vocational education	3.87	2061	0.762
	Higher general or vocational education	3.89	951	0.768
	Academic education	3.92	426	0.841
	Employed on a permanent basis (indefinite)	3.87	3804	0.755
	Employed on a temporary basis with a chance for permanent employment	3.95	289	0.835
	Employed on a temporary basis (definite)	3.72	226	0.904
	Temporary worker	3.51	63	0.687
	Stand-by employee	3.97	143	0.725
	Freelancer	4.18	23	0.397
	Self-employed	4.33	223	0.839
	Employed in a family business	3.98	16	0.576
Fulltime/parttime contract	Parttime (<36 uur/week)	3.91	2048	0.765
	Fulltime (36 uur/week of meer)	3.87	2713	0.788
Profession	Crafts and industrial profesions	3.80	736	0.771
	Transport professions	3.77	247	0.963
	Administrative profession	3.86	595	0.798
	Commercial professions	3.86	775	0.765
	Service professions	3.90	641	0.796
	Health care and aid professions	3.93	543	0.718
	Teachers	4.01	187	0.674
	Professionals/specialists	3.91	496	0.800
	Agricultural professions	3.95	122	0.674

		Taken all together, to what extent are you satisfied with your work? (1=very dissatisfied – 5=very satisfied)		
		Mean	N	SD
Sector	Managerial functions	3.96	258	0.782
	Other professions	4.02	164	0.674
	Industry	3.83	621	0.736
	Building & construction industry	3.86	279	0.732
	Trade	3.84	764	0.784
	Transport and communication	3.84	266	0.853
	Financial services	3.92	224	0.719
	Business services	3.79	470	0.886
	Education	3.98	300	0.758
	Health care & welfare work	3.93	773	0.758
	Other services	3.91	169	0.772
	Agriculture, forestry and fishery	3.97	123	0.704
	Electricity and water companies	3.75	18	0.873
	Hotels and restaurants	3.76	174	0.827
	Government	4.01	347	0.735
	Other companies	4.02	223	0.704

In the NEA (2003; table 8) we also look at the mean scores of the different subgroups. Some small but significant differences are:

- The younger age categories (15-24 years, 25-34 years and 35-44 years) are more satisfied with their working conditions compared to the older age categories (45-55 years and 55-64 years).
- People with a higher educational level are more satisfied with their working conditions compared to people with a middle or lower education level.
- Single people and people are less satisfied with their working conditions compared to the other household types, while people in other household situations are more satisfied with their working conditions compared to the other household types.
- People employed on a temporary basis (definite) are less satisfied with their working conditions compared to workers in other types of employment. Stand-by employees on the other hand are more satisfied with their working conditions compared to the other types of employment.
- Parttime workers are more satisfied with their working conditions compared to fulltime workers.

- People working in crafts and industrial professions are less satisfied with their working conditions, whereas people in managerial, administrative and commercial and other professions as well as professionals/specialists are more satisfied.
- People working in financial and business services are most satisfied with their working conditions, while people working in the branches hotels & restaurants, construction and other services are the least satisfied with their work.

Table 8: Mean scores of different subgroups on the variable job satisfaction based on the NEA 2003 data

		To what extent are you satisfied with your working conditions? (1= very dissatisfied – 5= very satisfied)		
		Mean	N	SD
Gender	Female	3.81	4265	0.802
	Male	3.79	5697	0.811
Age in categories	15-24 years	3.85	1559	0.812
	25-34 years	3.80	2702	0.787
	35-44 years	3.82	2696	0.803
	45-54 years	3.76	2194	0.808
	55-64 years	3.73	756	0.851
Education level	Low	3.78	3021	0.811
	Intermediate	3.78	4285	0.815
	High	3.85	2624	0.790
Household	Married cohabiting without children	3.80	2583	0.782
	Married cohabiting with children	3.81	4583	0.794
	Single parent	3.79	421	0.843
	Single	3.73	1622	0.866
	Other	3.90	739	0.791
Type of employment	Employed on a permanent basis (indefinite)	3.80	8339	0.791
	Employed on a temporary basis with a chance for permanent employment	3.80	662	0.846
	Employed on a temporary basis	3.70	464	0.907

		To what extent are you satisfied with your working conditions? (1= very dissatisfied – 5= very satisfied)		
		Mean	N	SD
Fulltime/part time contract	(definite)			
	Temporary worker	3.78	217	0.917
	Stand-by employee	3.95	250	0.825
	Part time (<36 hours/week)	3.83	3939	0.802
	Fulltime (36 hours/week or more)	3.79	5906	0.803
Profession	Crafts and industrial professions	3.66	1370	0.779
	Transport professions	3.73	429	0.774
	Administrative professions	3.87	1378	0.766
	Commercial professions	3.86	1550	0.792
	Service professions	3.75	1119	0.873
	Health care and aid professions	3.76	931	0.777
	Teachers	3.75	350	0.731
	Professionals/specialists	3.84	1018	0.809
	Agricultural professions	3.78	232	0.804
	Managirial functions	3.88	692	0.879
	Other professions	3.85	861	0.830
Sector	Industry	3.79	1524	0.809
	Building & construction industry	3.73	563	0.742
	Trade	3.82	1561	0.803
	Transport and communication	3.76	585	0.798
	Financial services	3.91	644	0.740
	Business services	3.84	1082	0.802
	Education	3.78	511	0.781
	Health care & welfare work	3.80	1474	0.797
	Government	3.82	898	0.836
	Other services	3.75	359	0.902
	Agriculture, forestry and fishery	3.77	314	0.789
	electricity and water companies	3.79	59	0.753

		To what extent are you satisfied with your working conditions? (1= very dissatisfied – 5= very satisfied)		
		Mean	N	SD
	Hotels and restaurants	3.70	423	0.918

In conclusion, less satisfied are men (TAS) and full time workers (NEA), single, or divorced workers, workers with a low education, or people working in elementary professions, workers with a temporary contract, workers in industry and building & construction and trade & horeca. The relation between age and job satisfaction is not so clear. In POLS and NEA the younger workers are more satisfied, whereas in the TAS the older workers are more satisfied.

3. Secondary analysis of the survey data on job satisfaction

Question 5. Is there any assessment of the relationship between job satisfaction and other variables related to organisational practices/independent work-related practices in national surveys data analysis/reports? Briefly mention the main findings on the cross-tabulation between the following factors and job satisfaction: (1) Job autonomy, (2) Working time and work life balance issues, and (3) Worker participation / involvement.

In the TAS 2004 there are several items and scales on job autonomy, working time and life balance and worker participation/involvement. Job satisfaction seems to be correlated to all of these items and scales (see table 9). The correlate is strongest for the items on worker participation/involvement. Workers who feel more involved in their organisation and people with less intentions to find another job with another employer are more satisfied with their jobs. Regarding job autonomy it seems that people who experience more autonomy in their job are more satisfied with their work.

Table 9: Correlates of variables regarding job autonomy, working time and work life balance issues, and worker participation / involvement with the variable job satisfaction based on the TAS 2004 data

	Taken all together, to what extent are you satisfied with your work? (1=very dissatisfied – 5=very satisfied)
<i>Job autonomy (scale; 1= low - 4= high job autonomy)</i>	0.161(**)
• Can you decide yourself how to do your work? (1= never – 4= always)	0.148(**)
• Do you decide yourself the order of your work/activities/duties? (1= never – 4= always)	0.118(**)
• Do you decide yourself on when to do a task? (1= never – 4= always)	0.116(**)
• Is your method of working prescribed? (1= never – 4= always)	-0.106(**)
• Can you choose your own method of working? (1= never – 4= always)	0.148(**)

	Taken all together, to what extent are you satisfied with your work? (1=very dissatisfied – 5=very satisfied)
Do you miss/neglect your family activities due to work responsibilities? (1= no never – 4= yes, very often)	-0.097(**)
Do you miss or neglect your work activities due to family responsibilities? (1= no never – 4= yes, very often)	-0.051(**)
<i>Inclination to look for another job (scale; 1= low - 2= high tendency)</i>	0.431(**)
• Over the last year did you consider finding another job than your job with your current employer? (1= yes – 2=no)	0.356(**)
• Over the last year did you actually do something to find another job? (1= yes – 2=no)	0.302(**)
• If it were up to you, would you still work with this organization over 5 years? (1= yes – 2=no)	-0.372(**)
I feel perfectly at home in this organization (1= totally agree – 5= totally disagree)	0.569(**)
Compared to most other organizations working with this organization is very attractive (1= totally agree – 5= totally disagree)	0.496(**)

**** Correlation is significant at the 0.01 level (2-tailed).**

The highest correlations are found between job satisfaction and questions about the inclination to look for another job/leave the job and ‘feeling at home in the organisation’.

In the POLS 2002 and the NEA 2003 there only are items on job autonomy, but not on working time, work life balance and worker participation/involvement. The correlates between job autonomy and job satisfaction are somewhat stronger in the NEA compared to the POLS, but for both the correlates are significant and in the same direction (see table 10 and table 11). People who experience more autonomy – regarding for example the way the work is done, work pace or ventilation at the workplace – are more satisfied with their job.

When looking at the relationship between job satisfaction and some other interesting indicators like income or work intensity it is found that job satisfaction is not (at all) just about money! There is a correlation of job satisfaction and the statement that ‘payment is good’) of about 0.159 ($p < 0.01$). It is also interesting to see that the correlation between job satisfaction and job intensity or job demands is as high or even higher than between job satisfaction and job autonomy. The correlations become particularly high when there are indications that the job intensity is becoming too high (do you have enough time to finish the work, do you have to hurry, do you have trouble with the work pace/work pressure, would you like to take it easier in your work ($0.182 < r < 0.280$)).

Table 10: Correlates of the variables on job autonomy with the variable job satisfaction based on the POLS 2002 data

	Do you enjoy your work? (1= yes, frequently – 3=no)
Set own work pace	0.084(**)
Decide yourself when to take leave	0.064(**)
Decide yourself the way the work is done	0.111(**)
Decide yourself the order of work activities	0.079(**)
Can interrupt work at any moment (e.g. break)	0.040(**)
Can control the temperature at the workplace yourself	0.081(**)
Can control the ventilation at the workplace yourself	0.086(**)

**** Correlation is significant at the 0.01 level (2-tailed).**

Note: The answer categories for these items are: (1) yes, frequently, (2) yes, occasionally, (3) no.

Table 11: Correlates of the variables on job autonomy with the variable job satisfaction based on the NEA 2003 data

	To what extent are you satisfied with your working conditions? (1= very dissatisfied – 5= very satisfied)
Job autonomy (scale,; 1=low-4=high autonomy)	0.164(**)
• Do you decide yourself the way the work is done?	0.136(**)
• Do you decide yourself the order of your work activities?	0.132(**)
• Do you decide yourself when to do a task?	0.133(**)
• Is your working order prescribed?	-0.112(**)
• Can you choose your own method of working?	0.141(**)

**** Correlation is significant at the 0.01 level (2-tailed).**

Note: The answer categories on the job autonomy items are (1) never, (2) occasionally, (3) frequently, (4) always.

Question 6 Please answer one of the following questions (3a, 3b or 3c - 500 words maximum):

Are there any examples of interesting survey approaches to quantifying and measuring job satisfaction – methodological aspects of capturing job satisfaction data in surveys? Please summarise the main findings.

Q6b. Van Saane et al. (2003)¹ have reviewed 35 studies in which 29 different instruments to measure job satisfaction were described. They looked at the reliability and validity of these measures and found that from these 29 instruments only 7 instruments met the defined reliability and validity criteria for use as evaluative tools in hospital environments. These scales were:

- The Job in General Scale (JIG); a scale of 18 items with 3 answer categories (yes, ? and no) measuring global job satisfaction.
- Andrew and Withney Job Satisfaction Questionnaire; a 5 item scale with a seven-point Likert scale (1= delighted - 7=terrible) measuring global job satisfaction.
- Job Satisfaction Survey (JSS); a multidimensional instrument developed for the social service sector consisting of 9 subscales (salary, promotion, supervision, fringe benefits, contingent rewards, operating procedures, co-workers, work and communication). The number of items is not mentioned in the article, but the response format is a six-point Likert scale (1= disagree very much – 6= agree very much).
- Emergency Physician Job Satisfaction Scale (EPJS); a 79 item multidimensional instrument with a seven-point Likert scale (-3= strongly disagree to 3= strongly agree), measuring global job satisfaction as well as six work factors (administrative autonomy, clinical autonomy, resources, social relationships, lifestyle and challenges). The instrument was designed for physicians working at an emergency department.
- McClosky/Mueller Satisfaction Scale (MMSS); a multidimensional instrument with 31 items and a five-point Likert scale (1= very dissatisfied – 5= very satisfied), designed for hospital staff nurses. Measuring extrinsic rewards, scheduling satisfaction, family-work balance, co-workers, interaction, professional opportunities , praise/recognition and control/responsibility.
- Measure of Job Satisfaction (MJS) a 38 item multidimensional instrument designed for the community nurse sector asking how satisfied you are with several different aspects of your job with a five-point Likert scale (very satisfied – very dissatisfied) measuring 5 work factors (personnel satisfaction, workload, professional support, salary and prospects and training).
- Nurse Satisfaction Scale (NSS); a 24 item multidimensional scale, designed for nurses, with a seven-point Likert scale (1=strongly agree – 7= strongly disagree), measuring 7 work factors (administration, co-workers, career, patient care, relations with supervisor, nursing education and communication).

The psychometric quality criteria used in this article were:

- Internal consistency scale total should be >0.79
- Internal consistency scale range coefficient should be >0.79
- Test-retest coefficient scale should be >0.79
- Test-retest range of scales should be >0.79
- Convergent validity scale score should be >0.79
- Convergent validity sub-scale correlation range should be >0.79
- Discrimination validity should be <0.50

¹ Saane, N. van, Sluiter, J.K., Verbeek, J.H.A.M. & Frings-Dresen, M.H.W. (2003). Reliability and validity of instruments measuring job satisfaction – a systematic review, in *Occupational Medicine*, 53, 191-200.

- Content validity: the scale should at least contain 4 of the 11 work factors that were considered to represent the content of job satisfaction.

These 11 work factors were: work content, autonomy, growth/development, financial rewards, promotion, supervision, communication, co-workers, meaningfulness, workload, and work demands.

As a minimum, an adequate instrument should meet criteria for internal consistency and convergent validity. The other criteria are additional and will bolster the quality of the instrument.

Irene Houtman and Karin Jettinghof, [TNO Arbeid](#)