Report No 3:2006

The Salaried Employee in the Modern Working Life: Threats and Challenges

Technical report on the sample, data collection, and measurement properties of the instruments

Katharina Näswall
Stephan Baraldi
Anne Richter
Johnny Hellgren
Magnus Sverke

alecta
Arbetslivsinstitutet
LO TCO SACO
SALTSA — JOINT PROGRAMME FOR WORKING LIFE RESEARCH IN EUROPE
The National Institute for Working Life and The Swedish Trade Unions in Co-operation

SALTSA is a collaboration programme for occupational research in Europe. The National Institute for Working Life in Sweden and the Swedish confederations of trade unions SACO (the Swedish Confederation of Professional Associations), LO (the Swedish Trade Union Confederation) and TCO (the Swedish Confederation of Professional Employees) take part in the programme. Many problems and issues relating to working life are common to most European countries, and the purpose of the programme is to pave the way for joint research on these matters from a European perspective.

It is becoming increasingly obvious that long-term solutions must be based on experience in and research on matters relating to working life. SALTSA conducts problem-oriented research in the areas labour market, employment, organisation of work and work environment and health.

SALTSA collaborates with international research institutes and has close contacts with industry, institutions and organisations in Europe, thus linking its research to practical working conditions.

Contact SALTSA
Lars Magnusson, National Institute for Working Life, Tel: +46 8 619 67 18,
e-mail: lars.magnusson@arbetslivsinstitutet.se
Torbjörn Strandberg, LO, Tel: +46 8 796 25 63, e-mail: torbjorn.strandberg@lo.se
Mats Essemyr, TCO, Tel: +46 8 782 92 72, e-mail: mats.essemyr@tco.se
Charlotta Krafft, SACO, Tel: +46 8 613 48 62, e-mail: charlotta.krafft@saco.se

SE-113 91 Stockholm, Sweden
Tel: (+46) 8-619 67 00, fax: (+46) 8-656 30 25
Web: www.arbetslivsinstitutet.se/saltsa
Printed at Elanders Gotab
ISSN: 1404-790X

Table of contents

Foreword

This project ("The salaried employee in the modern working life: Threats and challenges") has been carried out with the financial support from the Swedish National Institute for Working Life through the Joint Programme for Working Life Research in Europe (SALTSA) and from Alecta granted for 2003-2006 to Magnus Sverke at the Department of Psychology, Stockholm University.

Address correspondence to Katharina Näswall, Department of Psychology, Stockholm University, 106 91 Stockholm, Sweden; knl@psychology.su.se.

All authors are affiliated with the Department of Psychology, Stockholm University. We also want to thank Caroline Cederström, who was instrumental during data collection.

Introduction

Working life has been subject to many changes over the last decades. A particular change that has had a great impact on the modern working life is the gradual shift from production to services. As a consequence of this, mental rather than physical work activities are emphasized. The objective of the working process is no longer a ready-made product, but rather a communicative process with the goal of interpreting the customer's needs and expectations (Allvin, Wiklund, Härenstam, & Aronsson, 1999). Another change affecting the modern working life is the increasing demand for flexibility. This is a consequence of the necessity for organizations to handle unpredictability in order to survive. In order for an organization to become more flexible, the employees need to have an increased degree of autonomy in their work so that they can react fast to the wishes and demands of their costumers.

However, such self-direction and autonomy might be problematic if the employee lacks sufficient resources to handle them, or if they are combined with tasks and expectations that are vaguely defined (Allvin, Aronsson, Hagström, Johansson, Lundberg & Skärstrand, 1998; van der Vliet & Hellgren, 2002). Indeed, it has been argued that autonomy in the modern working life rather is a sort of "pseudo-control", and that the increased self-direction therefore serves as a stressor and not as something that helps the individual to gain control over her work situation (Westerlund, Ahlberg-Hultén, Alfredsson, Hertting & Theorell, 2000). If an employee is uncertain about what she is expected to do, and what goals she should strive towards, it is reasonable to question whether the increased autonomy is beneficial to her – and whether she has in fact gained any increased control. It is well-known that autonomy in combination with unclear goals might lead to mental tension since autonomy requires that employees knows what they should do and also how they should do it. A work situation that creates mental tension constitutes a health risk in the long run.

Concurrent with the changing nature of work there has been a dramatic increase in long-term sick-leaves. In 2001 there were over 100,000 people on long-term sick-leave (over a year), which is the highest amount ever in Sweden (SOU 2002:5). Furthermore, fewer of the people who are on sick-leave tend to return to work. The mental diagnoses especially have increased, a trend which in some studies has been interpreted as a support of the hypothesis that there might be a close connection between the rise in the rate of sick-leaves and the changes in the psychosocial work environment (RFV 2002:4). According to a Swedish study, white-collar workers at the intermediate level have the largest increase in psychosocial demands in their work environment (Bäckman & Edling, 2000).

The hypothesized connection between changes in working life and the increase in sick-leave, however, needs further investigation since there is a lack of systematic, longitudinal research, and because it is not yet established exactly what work characteristics have changed.

Therefore, it is of outmost importance to understand and describe the working situation of salaried employees to further investigate what distinguishing features have changed, how these changes in work conditions might interact, and the relative importance of each of these changed conditions. Consequently, it is of vital importance to investigate the working environment of white-collar workers in the service sector in order to allow for the identification of factors that may have an impact on mental as well as physical ill-health. This is especially important both because the service sector is the fastest expanding sector of the labour market and because work-related health problems, apart from causing the affected people and their families a lot of pain, also constitute an enormous cost to society.

The purpose of the present project has been to describe new demands placed upon salaried employees in the modern working life and also the resources individuals can use to meet these demands. This study constitutes a further investigation of the aspects that were mapped out in a pilot study (van der Vliet & Hellgren, 2002) as especially important and where research gaps were found. Further, the project has investigated what consequences the gradually changing work characteristics have on employee job perceptions, performance, and health. In order to do so, we will study salaried employees over time.

General aim

The overall aim of the project is to contribute to the understanding of how the modern working life affects the individual employee. The project focuses on salaried employees among whom we have witnessed profound changes both in the conditions under which work is carried out and in the reported frequencies of psychological health complaints. Our theoretical basis in stress theories emphasizes the need to focus on the individual's subjective experience of the work situation. It also directs attention to the relation between what the individual feels that she gets from work, on one hand, and her attitudinal and behavioural reactions, on the other. Since the project focuses on the "modern" working life, more recent theories of job stress and job characteristics enable us to incorporate a number of factors characteristic of modern working life, not encompassed by traditional theoretical frameworks.

A schematic and simplistic representation of the model that has guided the research is presented in Figure 1. As can be seen from the figure, the focal

variables of the study can be classified under four different categories. The outcomes dealt with in the project will concern employee attitudes, performance, health and well-being. We have evaluated how such outcomes are affected by efforts/demands as well as rewards/resources characteristic of the modern working life. The project has also examined the role played by various demographic characteristics in these relationships. In order to study these new demands in working life, the project has also developed scales which are designed to capture the uncertainty inherent in many tasks.

More specifically, the research questions of the project concern themes like:

How does the individual employee perceive modern working life? (For instance, what makes an individual experience different efforts and demands? How are modern performance requirements perceived? What factors form the individual's attitudes towards individualized pay systems?);

What is the relative importance of various efforts/demands (e.g., flexibility demands, unclear goals, and job insecurity) for various outcomes (work related attitudes, work-family interference, and employee health)?;

What is the relative importance of various rewards/resources (e.g., employability, control) for these outcomes?;

Is there a moderating (buffering) role of rewards/resources on the relation between efforts/demands and outcomes?

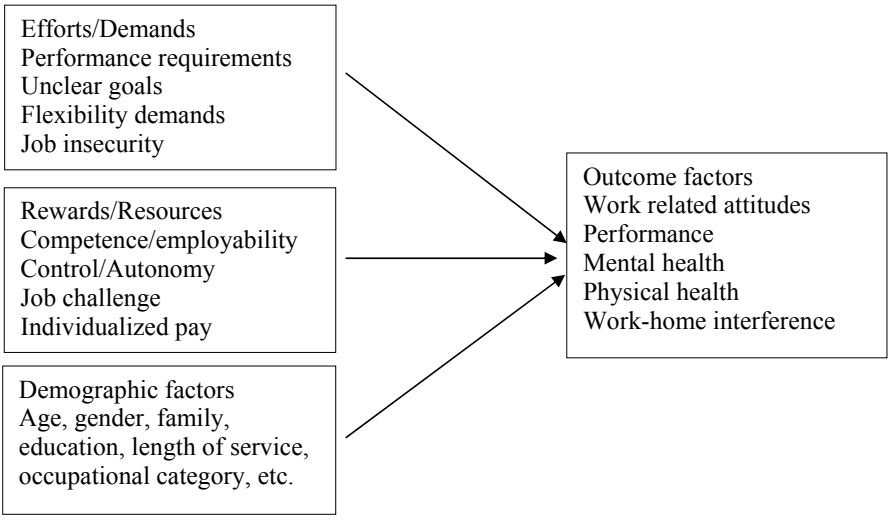

Figure 1. Research model

Method

The questionnaire

We developed a questionnaire aiming at capturing several different aspects of the working situation for the white-collar worker. All variables included are listed in Appendix A. Since we wanted to include as many different variables as possible, we constructed two versions of the basic questionnaire, and sent Version I to half the employees in each company, and Version II to the other half of the employees. The employees were randomly assigned which version they were to receive. Sample 4 (the group of teachers) all received a third version of the questionnaire, Version III. Table 1 presents the measures used in the questionnaire and in which version each measure appeared. The table also presents the abbreviation for each variable as well as how many items each measure consisted of.

The variables are presented in blocks. Blocks 1 through 5 and 9 through 11 are the same in all questionnaires (with only a few items as exceptions), whereas blocks 6 through 8 differ depending on the questionnaire version. Version I contains blocks 6:1, 7:1, and 8:1, Version II contains 6:2, 7:2, and 8:2, and version III contains blocks 6:1, 6:2, 7:2 and 8:2.

Organization specific questionnaires in Sample 2:

The questionnaire sent to the employees in Sample 2 included a question about at which location the respondent worked, the different offices were listed if they consisted of more than 10 employees. The leadership questions (Kr and Lri) were altered to fit the context. Instead of a group of items asking about the supervisor in general, we made two blocks of questions, one asking the respondents to answer the questions regarding their "closest supervisor" and the other block asking the same questions, but now in reference to the supervisor in charge of their current assignment, or project manager ("uppdragsansvarig"), since these supervisors often were not the same for the employees. In Sample 2 there was an additional question asking about alcohol use (Al01), which was eliminated in the questionnaires sent to the other samples.

At Time 2 the questionnaire sent to the Sample 2 employees was slightly modified – one question was added (Lgt02) regarding the closest manager the respondent reports to.

Table 1. Measures used in the questionnaire (no of items in the questionnaire sent to Sample 2 shown in parentheses)

	No items	Version I	Version II	Version III
Block 1	5	X	X	X
Bb Demographics	6	X	X	X
Ab Work demographics	8(9)	X	X	X
Block 2 Work Climate				
Lkr Job challenge demand	3	X	X	X
Mk Goal clarity	4	X	X	X
Rf Role conflict	5	X	X	X
Be Role overload, quantitative	3	X	X	X
Kb Role overload, qualitative	4	X	X	X
Pk Interpersonal conflicts	3	X	X	X
Kr Feedback	4 (8)	X	X	X
Po Powerlessness	3	X	X	X
Au Job autonomy	4	X	X	X
Pf Task completion ambiguity	4	X	X	X
Qk Task quality ambiguity	4	X	X	X
Lk Job challenge	4	X	X	X
Lri Communication with the manager	5 (8)	X	X	X
Block 3 Organizational characteristics				
Ko Job insecurity (quantitative)	3	X	X	X
Ka Job insecurity (qualitative)	4	X	X	X
Jm Gender equity	4	X	X	X
Ce Centralization	3	X	X	X
Tr Trust	5	X	X	X
Oj Overall justice	3	X	X	X
Block 4 Absence and safety				
Fr Absence	2	X	X	X
Wa Workplace accidents and safety compliance	3	X	X	X
Block 5 Work-related attitudes and behaviors				
Ar Attitude towards individualized pay	6	X	X	X
Ps Pay satisfaction	5	X	X	X
Js Job satisfaction	3	X	X	X
Oc Affective organizational commitment	4	X	X	X
Pp Perceived performance	5	X	X	X
Rw Responsibility for work outcome	3	X	X	X
It Turnover intention	3	X	X	X
Ae Employability (external)	5	X	X	X
Ai Employability (internal)	5	X	X	X
Wli Work-life imbalance	4	X	X	X
Lwi Life-work imbalance	4	X	X	X
Ovc Over commitment	6	X	X	X

Table 1 cont'd

	No items	Version I	Version II	Version III
Block 6:1 Coping				
CCS Coping (5 dimensions)	15	X		X
Block 6:2 Social support				
Ssc Social support co-workers	3		X	X
Sss Social support supervisor	3		X	X
Ssf Social support family	3		X	X
Block 7:1 Core self evaluation				
Est Self-esteem	10	X		
Ef Generalized Self-efficacy	8	X		
Lo Locus of control	8	X		
Ne Neuroticism	12	X		
Block 7:2 HP5i				
Pag Agreeableness (antagonism)	4		X	X
Pco Conscientiousness (impulsivity)	4		X	X
Pex Extraversion (hedonistic capacity)	6		X	X
Pne Neuroticism (negative affectivity)	4		X	X
Pop Openness (alexithymia)	4		X	X
Block 8:1 Mental health				
Gh General health questionnaire	12	X		
Block 8:2 Mental health				
Mdi Depression	18		X	X
Block 9 Somatic health				
Hb Health complaints	10	X	X	X
Block 10 Health behaviors				
Sk Quality of sleep	4	X	X	X
Lkm Medication	5	X	X	X
Ma Dietary habits	3	X	X	X
Block 11 Life outside work				
Mo Exercise	1	X	X	X
To Tobacco use	2	X	X	X
Al Alcohol	3(4)	X	X	X
Block 12 House work				
Ah Responsibility for housework	13	X	X	X
Open ended question	1	X	X	X
Total number of items	305 (316)	256 (267)	240 (251)	255 (266)

Data collection procedure

Wave 1 of the data collection started at the end of November 2004. All questionnaires were accompanied by a cover letter from the organization and a cover letter from the research group, containing description of the objective of the study, information on how to fill out the questionnaires, and information about confidentiality and data treatment. The first batch of questionnaires was

sent out to Sample 1 employees on November, with a yellow cover. In December the questionnaires were sent to Sample 2 employees, and at the expense and initiative of the management at Sample 2, a movie ticket as a "thank you for participating".

A postcard reminding those who had not replied were sent out after approximately two weeks, in the same colour as the questionnaire cover. There was almost a month's interval between the first and second reminder, which consisted of a new copy of the questionnaire. Three weeks after this it was determined that the response rate for Sample 2 was satisfactory, whereas the Sample 1 employees required a third reminder, this time in the form of a postcard.

The data collection in Sample 3 and 4 started in January. These employees were sent a first reminder, consisting of a postcard, approximately two weeks after the first questionnaire was sent out.

Wave 2 of the data collection started in early 3, 2005, following the same procedure as Wave 1, and was concluded in March 2006. The same version of the questionnaire was sent to the same address lists as in Time 1, regardless of whether the employees participated or not. In two cases the address lists were updated; Sample 1 provided a list where those who had left the company were removed, and Sample 2 provided a list where those who left the company were removed and new employees were added. The questionnaires sent to Sample 2 were accompanied with a movie ticket at Time 2 as well.

Participants

Approximately 20 organizations (their director of human resources or equivalent) were contacted over the phone, and informed of the objective of the study. They were told that we were conducting a longitudinal research project investigating factors related to sick leave and stress among white-collar workers. They were asked if they were willing to allow us to send the questionnaire to approximately 500 of their employees in administrative positions. They were told that we would give them a report of the results. Several were sent a one-page description of the project. Many organizations expressed an interest, but told us that they conducted their own research studies, and thus did not want to participate. Finally, four organizations agreed to participate, and sent us employee addresses and a cover letter signed by the appropriate person. A summary of response statistics is presented in Table 2 and demographic information for the four samples is presented in Table 3.

Sample 1

This is a large manufacturing company specializing in household appliances as well as forestry and farming equipment with headquarters in Gothenburg,

Sweden. At the first round of data collection, we were given access to 423 administrative employees, and 71 managers. The employees were randomly divided (by the research team) in two sub-samples according to which version of the questionnaire they received, sample 1a received version I, sample 1b received version II. At Time 1, 494 of the persons who received a questionnaire 317 returned theirs, for a response rate of 64%, after 4 persons who no longer worked at the company had been removed from the original sample.

At Time 2, the questionnaire was sent out to the same sample, but excluding those who had left the company since the first wave. This resulted in a sample size of 449 persons, of whom 233 returned their questionnaires, which resulted in a response rate of 51%. The longitudinal response rate, i.e., those who participated in both waves of the data collection was 70%, as 201 persons responded at both time points.

Sample 2

This is an accounting firm serving both organizations and small companies with financial consulting and advising. Their headquarters are in Stockholm, but there are offices all over Sweden. We were given access to all employees in the organization. The employees were randomly divided (by the research team) in two sub-samples according to which version of the questionnaire they received, sample 2a received version I, sample 2b received version II. Out of the 593 employees (of which 5 were removed because they no longer worked there), 500 returned their questionnaires for a response rate of 85%. The distribution of employees over the different offices is presented in the Appendix, Table A.1.1.

At Time 2 the questionnaire was sent out to the same group as at Time 2, excluding those who had left the organization, but including employees who had joined the company since the first wave. The questionnaires were sent out to 611 individuals, of which 483 sent back their questionnaires, which resulted in a response rate of 79%. The 400 persons who participated in resulted in a longitudinal response rate of 75%.

Sample 3

We were given access to all administrative personnel employed by a town approximately 160 km north of Stockholm. The employees were randomly assigned (by the research team) to either of two sub-samples, according to which version of the questionnaire they received, sample 3a received version I, sample 3b received version II. Out of the 560 in the original population, 5 were removed because they no longer worked there, and 408 returned their questionnaires for a response rate of 73%.

At Time 2, the questionnaire was sent to the same list of employees as at Time 1. However, during the data collection a number of people indicated that they were no longer with the organization, and were removed from the original population. Of the original group, 538 made up the study population, and 329 returned their questionnaires for a response rate of 61%. As many as 306 participated in both waves, which resulted in a longitudinal response rate of 78%.

Sample 4

The sample consists of all teachers employed by the same town as described above. The teachers received version III of the questionnaire and make up sample 4 in the study. The original sample consisted of 619 persons, from which 5 were excluded since they no longer worked there or decided not to participate. A total of 443 teachers returned their questionnaires for a response rate of 72%.

At Time 2, the questionnaire was sent to the same list of teachers as at Time 1. As in Sample 3, a number of people indicated during the data collection that they were no longer with the organization, and were removed from the original population. Of the original group 593 made up the study population, and 360 returned their questionnaires for a response rate of 61%. As many as 340 participated in both waves, which resulted in a longitudinal response rate of 78%.

Table 2. Summary of response statistics

	Sample 1	Sample 2	Sample 3	Sample 4
Time 1 sample	494	593	560	619
Time 1 usable responses	317	500	408	443
Time 1 Response rate	64%	85%	73%	72
Time 2 sample	449	611	538	593
Time 2 usable responses	233	483	329	360
Time 2 response rate	51%	79%	61%	61%
Participated in both waves	201	400	306	340
Longitudinal response rate*	70%	75%	78%	78%

* Proportion of those who participated at Time 1 who also participated at Time 2

Table 2. Demographics for the four samples at Time 1 and Time 2

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Bb01	Age M (SD)	45 (11)	43 (11)	49 (10)	50 (10)	45 (10)	42 (11)	49 (10)	51 (10)
Bb02	Women (%)	27	55	76	73	26	54	78	72
Bb03	Do you have children under the age of 12 living at home (% yes)	52	54	46	45	54	52	44	42
Bb04	Household (%)								
	Single	15.6	16.0	16.0	15.1	12.4	15.6	16	14,5
	Married/cohabitating	80.0	80.3	81.3	81.0	84.1	80.4	82	83
	Partner, not living together	4.4	3.6	2.5	3.8	3.5	3.5	2	2,2
	Living with parents	-	0.2	0.2	-	-	.4	-	0.3
Bb05	Highest level of education completed (%)								
	Compulsory school	5.7	2.4	6.9	0.7	5.0	2.7	6.8	-
	Vocational school	4.4	3.2	8.7	0.5	5.0	2.7	8.3	-
	High-school	38.9	21.1	19.1	0.9	43.3	22.8	15.4	1.1
	University/college	44.9	68.6	61.4	94.6	42.3	68.3	66.2	95.5
	Other	6.0	4.7	4.0	3.4	4.5	3.5	3.4	3.3
Lb08	Monthly salary, including any extras M(SD)	29 858 (21534)	29 721 (15084)	23531 (7062)	23168 (3904)	30200 (12400)	30666 (15300)	24173 (7256)	24000 (3592)

Table 2 cont'd

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Ab02	Type of employment contract (%)								
	Permanent	97.5	97.2	99.0	99.1	99.0	95.4	99.4	99.7
	Temporary work	1.6	0.8	-	-	1.0	1.0	-	-
	Employed by the hour	-	0.4	-	0.2	-	0.4	-	-
	Project based	0.3	0	0.2	0.2	-	0.2	-	-
	Trial period	0.6	1.2	-	0.2	-	2.5	-	-
	Other	-	0.4	0.7	0.2	-	0.4	0.6	0.3
Ab03	Full-time work (%)	92.4	77.8	85.1	88.8	91.0	78.3	85.8	82.9
Ab03b	If part-time, how many percent of full-time?	75 (12)	71 (16)	71 (15)	68 (17)	75 (13)	72 (14)	68 (16)	71 (16)
Ab05	Organizational tenure M(SD)	15 (12)	8 (7)	16 (12)	18 (12)	17 (12)	8 (7)	17 (11)	19 (12)
Ab07	Are you a member of a union organization? (% yes)	84.5	39.8	98.0	97.7	86	39	99	978
Ab09a	Has your work or work tasks changed during the last 12 months? (% yes)	43.1	21.6	48.9	43.9	39	18	42	43
Ab09b	If yes, was this change voluntary? (% yes)	59.5	73.8	54.3	43.9	65	77	57	52
Ab09c	If yes, was the change for the better? (% yes)	70.0	79.6	67.0	51.4	70	83	66	57

Measures

Identification variables

Idnr
The number assigned to each individual, randomly. The ranges indicate what company the respondent is employed in and which version of the questionnaire the respondent has received.

Table 4. Idnr and corresponding sample and version number

Id no range	Sample	Questionnaire
1101–1350	Sample 1	Version I
1501–1750	Sample 1	Version II
2101–2400	Sample 2	Version I
2501–2800	Sample 2	Version II
3101–3379	Sample 3	Version I
3501-3778	Sample 3	Version II
4101–4719	Sample 4	Version III

Sample
Each number represents the organization in which the respondents work:
1=Sample 1, 2=Sample 2; 3=Sample 3; 4=Sample 4

Form
Each number represents each version of the questionnaire: 1=version I;
2=version II; 3=version II.

Block 1 Demographics

Age Bb01
Measured as year of birth

Gender Bb02
1=woman, 2=man

Children at home Bb03
1=yes, 2=no

Household/Partner Bb04
1=single, 2=married/cohabitating, 3=partner but not cohabitating, 4=still living with parents

Education Bb05
1=compulsory school, 2=vocational school, 3=high school or equivalent, 4=academic studies, university level, 5=other

Type of contract Ab02
1=permanent, 2=temporary

Work hours Ab03
1=full-time, 2=part-time (percentage of full-time Ab03b)

Office location Lgt01 (only in Sample 2)
A number signifying each of the offices in Sweden (see Appendix Table A.1.1)

Closest manager Lgt02 (only in Sample 2, Time 2)
Listing which manager the respondent reports to (see Appendix Table A.1.2)

Union membership Ab07
1=yes, 2=no

Salary Lb08
Average monthly salary, including any extras

Organizational change Ab09a
1=yes, 2=no

Voluntary change Ab09b
1=yes, 2=no

Change for the better or worse Ab09c
1=for the better, 2=for the worse

Block 2 Work Climate

Lkr Competency demands
The scale consists of three items developed by van der Vliet & Hellgren (2002). The scale captures the sense that the work tasks demand the learning of new knowledge, and that the nature of work requires continuous training. The response alternatives ranged from 1 (disagree) to 5 (agree), where a high score indicates higher competency demands.

Mk Goal clarity
Combination of items from Rizzo, House, & Lirtzman (1970) and Caplan (1971). Consists of four items measuring the extent to which the purpose of one's work

tasks is clear. The response alternatives ranged from 1 (disagree) to 5 (agree), where a high score indicates higher goal clarity.

Rf Role conflict
This scale is modified and adapted based on the scale by Rizzo, House & Lirtzman's (1970), and consists of four items capturing a conflict between how the employee thinks the work should be done and how supervisors or others tell them to do it. Ungefär. The response alternatives ranged from 1 (disagree) to 5 (agree), where a high score indicates more role conflict.

Be Role overload, quantitative
This scale consists of three items from Beehr, Walsh, & Taber (1976), and measures the feeling of having too much to do in too little time. The response alternatives ranged from 1 (disagree) to 5 (agree); a high score represents a heavier workload.

Kb Role overload, qualitative
These four items were developed by Sverke, Hellgren, & Öhrming (1999) and capture the sense that the work is too difficult or demanding. The response alternatives ranged from 1 (disagree) to 5 (agree), a high score representing more difficult or demanding tasks.

Pk Interpersonal conflicts
To measure the extent to which the work is negatively affecte by conflicts between employees, three items developed by Hovmark & Thomsson (1995) were used. The response alternatives ranged from 1 (disagree) to 5 (agree), a high score indicating a more negative impact of interpersonal conflicts.

Po Powerlessness
Three items developed by Ashford, Lee, & Bobko (1989) were used to measure the sense of influence over one's work situation and organizational processes. The response alternatives ranged from 1 (disagree) to 5 (agree), a high score represents a stronger sense of control.

Au Job autonomy
This four item scale was adapted by Sverke & Sjöberg (1994), based on Hackman & Oldham (1975) and Walsh, Taber, & Beehr (1980), and measures the extent of autonomy and influence over how the work is carried out. The response alternatives ranged from 1 (disagree) to 5 (agree); a high score indicates a stronger sense of autonomy.

Pf Task completion ambiguity
In order to capture to what extent the employees could, or had to, determine themselves when their tasks were completed, we developed four items to capture this. A high score on this scale reflects that the individual feels she has a sense of what her tasks entail, and when they can be considered to be complete. The response alternatives ranged from 1 (disagree) to 5 (agree). The scale is reversed to reflect ambiguity.

Qk Task quality ambiguity
Four items were developed to capture to what extent the individual feels she can determine when her job is well, or adequately, done. A high score on this scale is supposed to reflect whether the individual can determine the quality of her work herself. The response alternatives ranged from 1 (disagree) to 5 (agree). The scale is reversed to reflect ambiguity.

Lk Job challenge
This four item scale was developed by Hellgren, Sjöberg & Sverke (1997), and a high score captures to what extent the work contributes to new knowledge and learning. The response alternatives ranged from 1 (disagree) to 5 (agree).

Kr Feedback
To measure knowledge of results four items developed by Hackman & Oldham (1975) were used. This measure captures whether respondents get feedback from the supervisor on how they have carried out their work. The response alternatives ranged from 1 (disagree) to 5 (agree), where a high score indicates that the supervisor gives feedback.

Lri Communication with the manager
This scale was based on Colquitt (2001), and measures the degree to which the supervisor employs clear and open communication in relation to the employee. A high score indicates clear and ample communication, and the response alternatives ranged from 1 (disagree) to 5 (agree).

Block 3 Organizational characteristics

Ko Job insecurity (quantitative)
This scale consists of three items developed by Hellgren, Sverke & Isaksson (1999), and measures a worry and uncertainty regarding the future existence of the employment. The response alternatives ranged from 1 (disagree) to 5 (agree), and a high score on this scale represents a strong sense of quantitative job insecurity.

Ka Job insecurity (qualitative)
This scale consists of four items developed by Hellgren, Sverke & Isaksson (1999), and measures a worry about losing valued features of the job. A high score indicates a high level of qualitative job insecurity, and the response alternatives ranged from 1 (disagree) to 5 (agree).

Jm Gender equity
These four items were developed by van der Vliet & Hellgren (2002) and measure to what extent there are differences between employees based on gender. The response alternatives ranged from 1 (disagree) to 5 (agree), and a high score represents a high level of equity.

Ce Centralization
This scale consists of three items adapted from Mellor, Mahieu, & Swim (1994), and measure to what extent the staff is encouraged or allowed to participate in decision making processes. The response alternatives ranged from 1 (disagree) to 5 (agree), and a high score represents a more centralized decision making process.

Tr Trust
Trust was measured with four items based on Robinson (1996), reflecting perceptions of the employer's trustworthiness. The response alternatives ranged from 1 (disagree) to 5 (agree), and a high score indicates that the employer is deemed trustworthy.

Oj Overall justice
This three-item scale was developed by van der Vliet & Hellgren (2002) and measures a general sense of fair treatment by the employer. The response alternatives ranged from 1 (disagree) to 5 (agree), and a high score reflects feelings of fairness.

Block 4 Absence and safety behavior

Fr Absence
These two items were developed for the purpose of this study and based on Isaksson, Hellgren, & Pettersson, 1998. Both questions utilize a write-in response mode.

Fr01 asks how many times (fr01a), and total number of days (fr01b), the respondent has been home from work due to illness.

Fr03 asks how many times (fr03a), and total number of days (fr03b), the respondent has gone to work despite illness.

Wa Workplace accidents and safety compliance
This was captured with four single items, translated and adapted from Probst & Brubaker, 2001. Essentially the items reflect how often the individual ignores safety regulations, with a five-point response scale (1=never – 5=always), and how many incidents (near-accidents) or actual accidents that the individual has witnessed or been exposed to, during a 12-month period (write-in response mode).

Block 5 Work-related attitudes and behaviours

Ar Attitude towards individualized pay
This scale consists of six items developed by Eriksson, Sverke, Hellgren & Wallenberg (2002), concerning the respondent's attitudes toward the salary being determined in each individual case. The response alternatives ranged from 1 (disagree) to 5 (agree), and a high score reflects a positive attitude toward individualized pay.

Ps Pay satisfaction
This scale, consisting of five items, was constructed by Judge & Welbourne (1994), and measures the degree of satisfaction with the current salary. The response alternatives ranged from 1 (disagree) to 5 (agree), and a high score reflects satisfaction with the level of pay.

Js Job satisfaction
The three items comprising the scale measuring satisfaction with the job were developed by Hellgren, Sjöberg, & Sverke (1997), based on Brayfield & Rothe (1951). The response alternatives ranged from 1 (disagree) to 5 (agree), and a high score reflects satisfaction with the job.

Oc Affective organizational commitment
This scale is the short version of the scale developed by Allen & Meyer (1990) measuring affective commitment to the organization. The response alternatives ranged from 1 (disagree) to 5 (agree), and a high score reflects strong commitment to the organization.

Pp Perceived performance
This five-item scale was developed by Hall & Hall (1976) and measures self-rated performance. The response alternatives ranged from 1 (disagree) to 5 (agree), and a high score reflects the perception that one's own performance is good.

Rw Responsibility for work outcome
This scale was developed by Hackman & Oldham (1975), and consists of three items measuring the degree to which respondents feel that they are responsible for the outcome of their work efforts. The response alternatives ranged from 1 (disagree) to 5 (agree), and a high score reflects strong sense of responsibility for the quality of one's work.

It Turnover intention
This scale, consisting of three items, was developed by Sjöberg & Sverke (2000) and measures the strength of the respondent's intentions to leave the present position. The response alternatives ranged from 1 (disagree) to 5 (agree), and a high score reflects a strong intention to leave the job.

Ae Employability (external)
This scale was developed by van der Vliet & Hellgren (2002), and consists of five items measuring the respondent's sense of being attractive to other employers, and the ability to find work outside the present organization. The response alternatives ranged from 1 (disagree) to 5 (agree), and a high score reflects a strong sense of external employability.

Ai Employability (internal)
This scale was developed by van der Vliet & Hellgren (2002), and consists of five items measuring the respondent's sense of being attractive to the present employers and the possibility to finding alternative work within the present organization. The response alternatives ranged from 1 (disagree) to 5 (agree), and a high score reflects a strong sense of internal employability.

Wli Work-life imbalance
This scale, based on Netemeyer, McMurrian, & Boles (1996), consists of four items measuring to what extent working life affects life outside work. The response alternatives ranged from 1 (disagree) to 5 (agree), and a high score reflects a negative effect of work on life outside work.

Lwi Life-work imbalance
This scale, based on Netemeyer, McMurrian, & Boles (1996), consists of four items measuring to what extent life outside work affects work tasks. The response alternatives ranged from 1 (disagree) to 5 (agree), and a high score reflects a negative effect of life outside work on the carrying out of work tasks.

Ovc Over-commitment
This scale was developed for the purposes of the study and consists of six items measuring to what extent work issues are on the respondent's mind outside of

work, and captures a perception of work spreading into other areas of life, not in terms of actual time spent on work tasks, but time thinking about work. he response alternatives ranged from 1 (disagree) to 5 (agree), and a high score reflects greater degree of over commitment.

Block 6.1 Coping strategies

CCS Coping strategies
A five-factor scale developed by Guppy, Edwards, Brough, Peters-Bean, Sale, & Short was translated. This was the 15-item version of their scale, which initially consisted of 21 items.

Each factor represents an aspect of the coping process: Changing the situation, Accommodation, Devaluation, Avoidance, and Symptom reduction. The response alternatives ranged from 1 (disagree) to 5 (agree). This scale was included in versions I and III.

Block 6.2 Social support

Ssc, Sss, Ssf, Social support
Based on Caplan et al. (1975), and other social support literature 10 items representing 3 factors were developed for the purposes of this study. This scale consists of three factors based on the source of the support – co-worker support, supervisor support, and family support. The response alternatives ranged from 1 (disagree) to 5 (agree), and a high score on either scale reflects a sense that support is available. This scale was included in versions II and III.

Block 7.1 Core self-evaluation

The scales capturing the higher-order construct Core self-evaluations was presented by Judge, Bono, Erez, Locke, & Thoresen (2002) and is comprised of four scales measuring four different constructs.

Est Self-esteem
This scale consists of 12 items developed by Rosenberg (1965), measuring the individual's sense of self-esteem – generally referring to a positive evaluation of oneself. The responses were given on a five-point scale, where 1=disagree and 5=agree, and a high score reflects better self-esteem.

Ef Generalized Self-efficacy
This eight-item scale was developed by Judge, Locke, Durham, & Kluger, (1998) in order to reflect general self-efficacy in the individual. Such self-efficacy may be described as beliefs about one's capability to achieve what one sets out to do (Bandura & Locke, 2003). The responses were given on a five-point scale, where

1=disagree and 5=agree and a high score reflects a stronger sense of self-efficacy.

Lo Locus of control
This eight-item scale was based on Levenson (1981) and consisted of eight items, where a high score reflects internal locus of control, i.e. the sense that the individual herself believes she has control rather than believing in luck. The response alternatives ranged from 1 (disagree) to 5 (agree). Item Lo01 had to be removed from the scale due to a faulty translation.

Ne Neuroticism
This scale consists of 12 items developed by Eysenck & Eysenck (1968), reflecting the tendency to interpret situations negatively and to be pessimistic. The response alternatives ranged from 1 (disagree) to 5 (agree), and a high score reflects a higher degree of neuroticism.

Block 7.2 HP5i

These scales were included in versions II and III. They were developed by Gustavsson, Jönsson, Linder, & Weinryb (2003) and measured on a five-point scale where 1=disagree and 5=agree. All scales were made up of four items, with the exception of the scale measuring Extraversion (Pex), which consisted of six items in its original version.

Pag Agreeableness (antagonism)
This dimension measures the tendency of the individual to view people and interpersonal situations with hostility, as an indication of the level of agreeableness. A high score indicates hostility.

Pco Conscientiousness (impulsivity)
In order to measure conscientiousness, a scale measuring impulsivity – the tendency to act before thinking – was used. A high score reflects impulsivity.

Pex Extraversion (hedonistic capacity)
Hedonistic capacity is one of the factors which reflect extraversion, and measures the ability and tendency of the individual to seek out and take pleasure in interpersonal relationships. A high score reflects a greater degree of hedonistic capacity. One of the items developed after the publication of the study, item pex01, did not seem to work with the scale had to be removed and was removed in this study.

Pne Neuroticism (negative affectivity)
As part of the neuroticism construct, negative affectivity – the susceptibility to negative emotions and nervous tension – was measured. A high score reflects a higher degree of negative affectivity.

Pop Openness (alexithymia)
In order to measure the degree of openness, the scale for alexithymia – the difficulty of experiencing of expressing emotion – was used. A high score reflects a greater difficulty in acknowledging or talking about emotions.

Block 8.1 Mental health complaints

Gh General health questionnaire
This 12-item version by Goldberg (1979) was included in version I of the questionnaire and describes the general mental health of the individual. The response alternatives ranged from 0 (never) to 3 (always), and a high score reflects a greater degree of mental health complaints.

Block 8.2 Depressive symptoms

Mdi Depression
This 17-item scale was based on the 10-time scale developed by Bech, Rasmussen, Raabaek Olsen, Noerholm & Abildgaard (2001) captures the most important symptoms of clinical depression (e.g., feelings of hopelessness, low self-worth, and lack of interest in life, etc) and to what extent they have been present during the last two weeks. There is also an additional item reflecting to what extent these symptoms have been problematic during the last two weeks. The responses were given on a four-point scale ranging from 1 (not at all) to 4 (all the time), where a high score reflects more depression. This scale was included in versions II and III.

Block 9 Somatic health complaints

Hb Health complaints
This scale was modified by Isaksson & Johansson (1997) based on Andersson (1986), and modified for the purpose of this study. The scale consists of ten items reflecting various physical health complaints. The responses were given on a five-point scale ranging from 1 (never) to 5 (always), a high score reflects more frequent physical health complaints.

Block 10 Life outside work

Sk Quality of sleep
This three-item scale was developed by Gustavsson et al. (2006) and measures sleep problems on a five-point scale (1=never – 5=always). One additional item measures problems with waking up.

Lkm Medication
Five items developed by Gustavsson et al. (2006) reflect the use of different types of medications, e.g., for problems with indigestion, pain, sleeping problems, worry or depression, each on a five-point scale (1=never – 5=always).

Ma Dietary habits
Three items developed by Gustavsson et al. (2006) ask whether the respondent eats breakfast, lunch and dinner, each on a five-point scale (1=never – 5=always).

Block 11 Health behavior

Mo Exercise
One item asks how often the individual exercises – i.e., engages in some physical activity for 30 minutes or more. This question was developed by Gustavsson et al. (2006).

To Tobacco use
Two items ask whether the respondent smokes or uses chewing tobacco. The questions in this block were developed by Gustavsson et al. (2006).

Al Alcohol
Four items measure the respondents' alcohol use – whether they drink, how often, and how much, as well as how often the respondent gets intoxicated. These questions are based on the AUDIT questionnaire developed by the WHO (2001).

Block 12 House work

Ah Responsibility for house work
These 13 items measure the extent to which the respondent shares responsibilities for domestic chores. The scale is adapted from Mårdberg, Lundberg, & Frankenhaeuser (1991) and assesses the degree of responsibility the respondent believes he or she has over household issues, in the main areas of household chores, house maintenance, and childcare.

Extra Open-ended question

Ex 01
The questionnaire is concluded with an open-ended question, asking the respondents to comment or give additional information.

Results

Appendix (Tables A.2.1 - A.12.3) presents descriptive statistics, frequency distributions, factor analyses results, and reliability estimates for all measures used in the project. All index variables were analyzed with factor analyses. Factor structure was examined using principal axis factoring to investigate whether the scales' items would load satisfactorily into one single dimension. When one dimension was not obtained, this has been noted, and a one factor solution specified and used to calculate factor loadings and eigenvalues. All index variables' internal consistency was checked by calculating Cronbach's alpha. A mean comparison showed that there were very few changes over time in the absolute levels of the different scale, and only the mean levels from Time 2 are presented in the text below, but more information can be found in the tables for the individual scales. Tests for stability of factor structure were deemed outside the scope of the present report.

Block 2 Work Climate

Tables A.2.1 through A.2.15 describe factor structures and reliability estimates for all index variables/scales in Block 2. In general, the scales in this block showed good factor structures and reliabilities; loading in one single factor, explaining a satisfactory amount of variance, and showing stable internal consistency. However, the analyses revealed problems in some scales

Regarding *Competency demand (Lkr),* the scale's items loaded onto one single factor. However, as can be seen in Table A.2.1, the scale showed rather low internal consistency with alpha values a little over 0.7, with the exception of Sample 4 where alpha dropped below the common lower threshold of 0.70 (α = 0.68). At Time 2 Cronbach's alpha ranges between .72 and .77. The factor solution shows the items account for at least 46 % of the variance. The mean value level was fairly similar in all samples and ranges between 3.31 and 3.62. Also the standard deviation level was comparable (between 0.84 and 0.93).

The scale measuring *Goal clarity (Mk)* exhibited good measurement properties in all samples, with reliability ranging between .79 and .85 (see Table A.2.2). At Time 2 the solution accounts for about half the variance (48-57%). The reliabilities were satisfactory for all samples (higher than .78). The mean ranged

between 3.74 and 3.98 and the standard deviations could be found in the interval of 0.76 and 0.85.

The scale measuring *Role conflict (Rf)* was also psychometrically sound, with reliability ranging between .77 and .78, and above 40% of variance explained by the items (see Table A.2.3). At Time 2 40% of the variance was explained by the one-factor solution and the Cronbach's alpha level was between .77 and .81. The mean level varied between 2.01 and 2.37.

Table A.2.4 shows measurement properties for *Quantitative Role Overload (Be)*. This scale exhibited good measurement properties, with alpha ranging between .74 and .81, and above 50% of variance explained in all samples except Sample 2, where it was 48%. At Time 2 the mean value for the scale measuring quantitative role overload could be found between 3.27 and 2.55. The standard deviation ranged from 0.88 till 1.00. Table A4 further shows that the one-factor structure explained at least 48% of the variance. The reliability coefficients were found in an acceptable area in all samples (>.73).

Table A.2.5 shows the measurement properties *of Qualitative Role Overload (Kb).* The scale explained little more than 38 % of the variance in Sample 1. Also, in the same sample, the scale's reliability measured 0.71, just above the common lower threshold for acceptable Cronbach's alpha. With the exception of Sample 1, this scale exhibited satisfactory measurement properties in the other three samples. At Time 2 the mean varied in between 2.06 and 2.62 and the standard variance could be found in the interval of 0.75 and 0.96. Cronbach's alpha was sufficient for all samples, over .70. One factor was extracted which accounted at least for 44% of the variance.

The scale measuring *Interindividual conflicts (Pk)* exhibited good measurement properties (see Table A.2.6), with alphas ranging between .86 and .89, and around 70% of the variance explained in all samples. At Time 2 the one factor solution accounted for at least 70% of the variance. Mean values are fluctuating between 2.07 and 2.58. The standard deviations vary in the interval of 1.09 and 1.20.The Cronbach's alpha estimates were satisfactory (around .87 and higher).

A somewhat problematic scale in this block was *Perceived control (Po)* and its measurement properties are shown in Table A.2.7. The scale did load onto one single factor, explained over half of the variance, and showed satisfactory internal consistency ($\alpha = 0.78$), but only in Sample 2. In the other three samples, the scale failed to explain more than 46% variance in any one sample, one item (Po02) had a almost non-existent factor loading in Sample 3 and Sample 4, and the scale revealed reliability estimates as low as 0.38, and no higher than 0.62. The same applies to the data from Time 2: the proportion of variance explained ranged from 36 to 55%. The mean level varies in the interval of 2.99 and 3.39 and the standard deviation could be found between 0.69 and 0.88. The reliability

estimates were only satisfactory in Sample 2 (.78), as the other samples just showed reliability coefficients between .41 and .61. Item po02 had a very low factor loading in sample 3 and 4 even had a zero correlation with the factor. Since the scale consists of only three items, there is no room for excluding any item in order to possibly improve the internal consistency of the scale. With these results in mind, this scale should be used with caution.

Table A.2.8 shows factor loadings and reliabilities of the scale measuring *Autonomy (Au).* These properties were satisfactory, with reliabilities ranging between .77 and .79, and variance explained not being lower than 45%. At Time 2 the reliability coefficients were all sufficient (>.70). The factor extracted explained 43% or more. Mean levels were between 3.73 and 3.80.

The scale capturing *Task completion ambiguity (Pf)* exhibited sound psychometric properties, as shown in Table A.2.9. The reliability was not below .80 in any sample, and the variance explained was above 50 in all samples. At Time 2 the mean and the standard deviation values are all on a similar level. All reliability coefficients were above .80, and at least 50% of the variance was explained. The items have been reversed to reflect a high degree of ambiguity and the mean levels range between 1.87 and 1.98.

The scale measuring *Task quality ambiguity (Qk)* is shown in Table A.2.10 and exhibited good psychometric properties. Reliabilities in all samples were above .80, and variance explained above 50%, and as high as 68% in Sample 2. At Time 2 the solution explained 60% or more of the variance. The reliabilities were found to be good (>.85). The items have been reversed to reflect a high degree of ambiguity, the mean levels varied between 1.81 and 2.09. In comparison to the other items of the scale, item Qk03 loaded fairly low in all samples at both time points.

A potentially problematic item was detected in the scale measuring *Job Challenge (Lk)* shown in Table A.2.11. In Sample 4, a one-factor solution had to be specified, since two factors formed. In the one-factor solution the scale showed marginally satisfactory measurement properties in Sample 4, where Lk03 loaded very weakly, and the reliability was as low as .57. In the other three samples a one-factor solution was found, and the reliability estimates ranged between .67 and .77. However, deleting item “Lk03” from the scale resulted in a Cronbach’s alpha of 0.74, 0.75, 0.67, and 0.62 respectively. Although these figures are not entirely up to standard, users of this scale should consider including only three items, excluding item Lk03. At Time 2 the at least 34% of the variance was explained. Cronbach’s alpha was rather low (between .60 and .76). Mean levels and standard deviations were fairly equal across the samples. The same item, Lk03, is problematic, especially in sample 3 and 4, at this time as well.

Table A.2.12 shows the scale measuring *Feedback (Kr)* which exhibited good measurement properties in terms of a sound pattern of factor loadings, reliabilities between .86 and .87, and two thirds of the variance explained. At Time 2 between 62 and 64% of the variance is explained. Cronbach's alpha was above .80. Mean levels ranged from 3.05 till 3.36. The standard deviations were all found to be between .92 and 1.00.

A similar pattern was exhibited by *Communication from the supervisor (Lri)* which had reliabilities on or just above and below .90, and a high proportion of the variance explained (around two thirds). At Time 2 the good structure was observed again, with at least 60% of the variance explained. The reliability coefficients were found to be on a very good level (>.88). Mean levels were between 3.02 and 3.42.

In Sample 2 the Feedback and Communication scales were also added and adapted to measure the interaction with the project manager ("uppdragsansvarig"). Both these scales, Kru (Table A.2.14) and Lriu (Table A.2.15), exhibited good measurement properties comparable to those of the original scales (Kr and Lri), at both Time 1and 2

Block 3 Organizational characteristics

Tables A.3.1 – A.3.6 show factor analysis and reliability results regarding measures included in Block 3 of the questionnaire, Organizational characteristics.

Quantitative Job insecurity (Ko) was measured by three items showing good measurement properties (see Table A.3.1). The internal consistency ranged from .88 to .92, and the variance explained was above 70% in all samples. At Time 2 more than 75% of the variance is accounted for. The reliability coefficient shows a very satisfactory internal consistency (>. 90). The mean values and the standard deviations are very similar in all samples, between 2.3 and 2.5.

Qualitative Job insecurity (Ka) was measured with four items shown in Table A.3.2. This scale exhibited adequate measurement properties, with reliabilities between .71 and .79. At Time 2 the solution explained more than 45% of the variance and all Cronbach's alpha values were above .76.

The scale measuring *Gender equity (Jm)* exhibited a potentially problematic item, Jm02 which loaded below .40 in Sample 3. However, the reliability in this sample was .79 and above .85 in the other three samples, and the variance explained was above 55% in all samples (see Table A.3.3). At Time 2 the mean levels ranged from 3.23 to 3.49. The standard deviations can similar and can be found in the interval of .94 -.96. The coefficient alpha estimates were satisfactory (around .79 and higher). The one factor accounts for 56% variance or more.

The scale measuring degree of *Centralization (Ce)* exhibited adequate measurement properties, with reliabilities between .71 and .78, and explained

variance above 50% (see Table A.3.4). At Time 2 54% or more of the variance was accounted for. The Cronbach's alpha values were all on a satisfactory level (<.72). The mean levels ranged from 2.83 to 3.14, but the standard deviations were fairly equal.

Organizational trust (Tr) was measured by a scale exhibiting good measurement properties, with reliabilities above .90 in all samples, and the scale explained two thirds or more of the variance (see Table A.3.5). At Time 2 the variances explained were fairly similar across samples (> 72%) and the alpha coefficient was very high (>.93). The mean levels were between 3.13 and 3.37.

Table A.3.6 shows the scale measuring *Organizational justice (Oj),* which exhibited good psychometric properties, with high reliability between .88 and .90, and variance explained above 70% in all samples. The same was found at Time 2, when 73% or more of the variance was explained, and the reliability coefficient estimates were more than satisfactory (>.89). The mean levels were not very different, between 2.27 and 3.39.

Block 4 Absence and safety behavior

Tables A.4.1 through A.4.8 show distribution frequencies and descriptive statistics for all variables included in Block 4 in the questionnaire, Work absence and Workplace accidents and safety compliance. These single item measures showed that a lot of respondents chose not to answer; there is a lot of internal missing on these items.

Among the items pertaining to *Safety behavior (Wa)* it seems that Sample 2 in particular did not choose to respond to these items. The best response was is in Sample 1. This may be due to the nature of the questions in relation to the nature of the job. Sample 2 consists of accountants and Sample 1 is located at a manufacturing plant, even if the respondents are part of the administration. Safety issues may be less common in the accounting business than in manufacturing. Sample 3 and 4 have a lot of missing as well, but the rate is lower than Sample 2.

The questions concerning *Absence (Fr)* were also susceptible to internal missing. On Fr01a there were as many as 114 choosing not to answer in Sample 2, but only 12 in Sample 1. Missing in Sample 3 and 4 are 66 and 70 respectively. On the following questions there are over 100 missing in all samples, with almost 300 in Sample 2 and close to 200 in the other samples. The two questions asking about number of days absent (fr01b and fr03b) were the ones the respondents skipped to the greatest extent.

Another interesting result regarding the absence questions is the great difference between samples. Conclusions regarding this should be drawn with caution, given the low response rate, but Sample 3 and 4 exhibited a greater absence than the other two samples, and a much greater variation. On Fr01b the

standard deviations were above 16 in Sample 3 and 4, compared to 7 and 3 in Sample 1 and 2 respectively.

At Time 2 the problem with internal attrition is a little less pronounced. Especially in Sample 2 it appears that a larger proportion has chosen to respond to these questions, for example, item fr03a had 134 missing in Sample 2 at Time 1, whereas only 34 are missing from the same sample at Time 2. The same change in response pattern is true for the questions regarding safety, where the proportion missing responses is much larger in Sample 2 at Time 1 (approx. 20%) than Time 2 (approx. 4%). The other samples also exhibit an increase in responses

There are no great differences in the amount of times or days spent on sick-leave, or working while sick. There is a slight increase in the days on sick-leave in Sample 3.

Regarding safety behavior the pattern of responses are similar at the two time points, Sample 2 appears to have the least exposure to accidents or potential hazards in the workplace.

Block 5 Work-related attitudes and behaviours

Tables A.5.1 through A.5.12 describe factor analysis and reliabilities for Work-related attitudes and behaviours, Block 5 in the questionnaire. Eight of the twelve scales in this section showed acceptable measurement properties.

When investigating the scale measuring *Attitudes towards individualized pay (Ar)* the analyses revealed one problematic item, Ar05. A one-factor solution had to be specified in Samples 2 and 3, since this item loaded in a different factor than the others. As can be seen in Table A.5.1, this particular item revealed low factor loadings across all samples, although the scale showed acceptable alpha values across all samples (α .77 - .81). However, the factor loadings of item Ar05 would suggest that this particular item relates to some other psychological construct or constructs, perhaps because of it being reversed. The same pattern was found at Time 2, a one-factor solution had to be specified in Sample 3. The factor explained 43% of the variance or more. Cronbach's alpha were in a satisfactory range (>.77) and the mean values were distributed between 3.23 and 3.85. The standard deviations are fairly similar (0.60-.82).

The scale measuring *Pay satisfaction (Ps*; see Table A.5.2) exhibited good measurement properties, with reliabilities on or above .94 in all samples. The variance explained by the five items was more than 75%. The same pattern was found at Time 2; a good factor structure in all samples, reliabilities above .95 and a high proportion of the variance explained. Mean levels ranged between 2.42 and 2.75.

The scale measuring *Job satisfaction (Js)* also exhibited good measurement properties, with high factor loadings and reliabilities of .88 or higher (see Table

A.5.3). No great changes in loadings or reliabilities at Time 2 were observed, or in mean levels, which remain between 3.74 and 3.96.

However, the results were less satisfying when analyzing *Affective organizational commitment (Oc).* A one-factor solution had to be specified in Samples 1, 3, and 4. With the measures' original four items included, the analysis generated moderate factor loadings for three of the items. Item Oc06, however, showed low factor loadings across all four samples (see Table A.5.4). Furthermore, with Oc06 included, the scale had poor internal consistency, ranging from .43 to .69. Exclusion of this item resulted in an overall improvement for the whole measure. A 3-item version of the scale yielded stable factor loadings and acceptable internal consistencies across all samples. The same pattern was found at Time 2, with the variance explained being 28% of variance or higher. A one-factor solution had to be specified in the same three samples. The reliability coefficients were low and varied between.48 and .68. The mean levels are in all samples on a fairly equal level around

In the analysis of the scale capturing *Perceived performance (Pp),* the results revealed overall moderately satisfactory measurement properties. In Sample 2 and 3 a one-factor solution had to be specified. Some of the factor loadings were on the lower side in all samples (see Table A.5.5). Furthermore, the scale showed rather low internal consistency (α =.67 - .69) across all four samples. The same applies to the results at Time 2, 34% of the variance was explained. However, a one-factor solution only had to be specified in Sample 2, and the reliability coefficients were all sufficient (>.70). Mean values and standard deviations are for all samples fairly equal, between 4.27 and 4.42.

Another problematic scale in this block of the questionnaire was *Responsibility for work outcome (Rw).* This three-item scale turned out to include one item (Rw01), which did not perform well (see Table A.5.6). The scale showed consistently low factor loadings for this item in all samples, in combination with little explained variance and poor internal consistency for the overall scale (alpha range .59 - .61). At Time 2 the problems were still present, the reliability coefficients were still rather low (>.58) and only 35 or more of the variance was explained. The mean values varied between 4.0 and 4.17. Standard deviations are found in the range of 0.61 and 0.64. With only three items, there is no room for item exclusion in order to improve variance explained and reliability coefficients. These possible deficiencies in scale properties should be taken into account when using this scale.

Turnover intention (It) was measured with a three-item scale exhibiting good measurement properties, consistent high factor loadings, moderately large proportion of variance explained (55% and greater), and satisfactory internal consistency, ranging between .77 and .85 (see Table A.5.7). At Time 2 the good

structure remained, with a similar amount of variance explained, and similar levels of reliability (.76 - .87).

The scale measuring *External employability (Ae)* consisted of five items showing a good factor structure, consistently high factor loadings, more than 50% of the variance explained, and adequately high internal consistencies, ranging between .79 and .87 (see Table A.5.8). At Time 2 over 50% of the variance was explained, and reliabilities were close to .85 in all four samples. Mean levels varied between 3.24 and 3.74.

Internal employability (Ai) was measured by a five-item scale exhibiting comparable measurement properties to the Ae scale. The factor loadings were consistently high, variance explained was close to 50% and higher, and reliabilities ranged from .82 to .89. A similar good structure and internal consistency was found at Time 2, reliability levels were fairly high (>.83) and the means varied between 2.81 and 3.28., and there were no major changes in the amount of variance explained.

Work-life imbalance (Wli) was measured by a four-item scale exhibiting good measurement properties, with reliabilities between .83 and .88, and high factor loadings and variance explained. At time 2 the around 63% of the variance was explained in all samples. The reliability coefficient was on a fairly equal level in all four samples (around .87). The means range between 2.30 and 2.50 as well as the standard deviation.

The scale measuring *Life-work imbalance (Lwi)* exhibited adequate measurement properties, even though the internal consistency was a little low, ranging from .73 to .81. However, factor loadings were consistently adequate (see Table A.5.11). At Time 2 explained variances of the scale life-work imbalance was at least 44%. The Cronbach's alpha was between .75 and .78, which indicates a moderately high level. Means were between 1.24 and 1.57.

The scale measuring *Over-commitment (Ovc)* showed good reliabilities (between .88 and .91) in all samples, as well as high factor loadings and explained variance above 50% (see Table A.5.12). At Time 2 the explained variance was 60% or higher in all samples. Alphas were around .90 which is fairly high values. The means are between 3.00 and 3.58 and the standard deviation was on a rather similar level in all four samples.

Block 6.1 Coping strategies

In Tables A.6.1.1 through A.6.1.5 measurement properties are presented for scales relating to Coping strategies (Ccs; Block 6.1). The scale used in this study is a short 15-item version of a 40-item scale. The short version was subdivided into 5 three-item scales relating to five different aspects of the coping process; Changing the situation, Accommodation, Devaluation, Avoidance, and Symptom

reduction. Our analyses revealed insufficient measurement properties inherent in some of the subscales.

In Table A.6.1 the scale measuring *Changing the situation* is presented, which exhibited good measurement properties. At Time 1 the variance explained is above or around 60%, and the reliabilities were around .81. Similar results were found at Time 2 where the solution accounted for around 60% of the variance in all samples and all alpha reliability values are about .80. Neither mean nor standard deviations varied much between the samples, but remained around 3.70.

As shown in Table A.6.1.2, the *Accommodation* scale did not exhibit satisfactory measurement properties in Sample 1 and the user should use this with caution. Use either as single items or do not include in analysis in Sample 1. Even though all items loaded on the same factor, item Ccs05 showed low factor loadings across all samples. In general, the scale also showed low internal consistency across all samples (alpha range .49 - .70). At Time 2, the eigenvalue was below 1 in Sample 3, where only 32% of the variance was explained, which, along with the reliability of .57, indicates some problems with the factor in this sample. In the other samples, 40% or more of the variance was explained, and the reliability coefficients range between .64 and .71, which is rather a low reliability. With the exception of Sample 3, the scale appears to work better at Time 2, especially in Samples 1 and 2 at Time 2, and the loadings are above .40 in all samples for all items, even the previously problematic Ccs05.

The scale measuring *Devaluation* exhibited satisfactory measurement properties in all four samples, with reliabilities ranging between .70 and .79. The same pattern was found at Time 2, at least 45% of the variance is explained, and Cronbach's alpha varied between .66 and .83, which is a slightly larger range than at Time 1. The internal consistency appeared to have decreased in Sample 3. Means ranged between 2.66 and 2.91.

The *Avoidance* scale had reliabilities ranging between .68 and .76, which may be considered low but satisfactory. The items all loaded in one scale, and the variance explained was above 50% in all samples except Sample 4. At Time 2 the scale exhibited similar measurement properties, with a variance explained between 43 and 59%, and reliabilities between .68 and .81. The means varied between 2.51 and 2.67.

The *Symptom reduction* scale exhibited some low loadings for item Ccs15 in Sample 1, 2, and 4. The results of the factor analysis showed that the eigenvalue did not exceed 1 in Samples 2, 3, and 4. The variance explained was below 40% in all samples, and the reliability was .50 or lower, which suggests that this scale has some inherent problems and should be used with great caution, or not at all. At Time 2 the scale appeared problematic again, with eigenvalues below 1 in Samples 2 and 3, and especially so in Sample 3, where the variance explained was as low as 21%, and the reliability was only .57. In the other samples the

variance explained was also problematic, ranging between 25 ad 34%, and the reliabilities between .38 and .56 call the internal consistency of the scale into question.

Block 6.2 Social support

The analyses of the Social support scales (Ssc, Sss, Ssf), Block 6.2 in the questionnaire are presented in Tables A.6.2.1 through A.6.2.3. As can be seen, all three measures in this block showed satisfactory measurement properties. Reliabilities were above .80 in all samples for all three scales, and the factor structures were clear with a variance explained above 50% in all scales in all samples.

The measurement properties for the scale measuring *Social support from co-workers (Ssc)* are shown in Table A.6.2.1. Reliabilities were above .80 in three samples, and .76 in Sample 2, and the factor structures were clear with a variance explained above 50% in all samples. At Time 2 the good measurement properties were still observed, reliabilities were above .80 in all samples, and variance explained was between 59 and 70%. Mean levels were between 3.40 and 3.87.

The measurement properties for the scale measuring *Social support from supervisor (Ssc)* are shown in Table A.6.2.2.. Reliabilities were above .90 in all samples, and the factor structures were clear with a variance explained above 80 in all samples. At Time 2 the results showed that at least 82% of the variance was accounted for and alpha levels in all samples were about .93 which indicates that the scale is highly reliable. The mean levels ranged between 3.20 and 3.57.

The measurement properties for the scale measuring *Social support from the family (Ssf)* are shown in Table A.6.2.3. The reliabilities were between .82 and .86, and the factor structures were clear with a variance explained between 50 and 60%. At Time 2 variance explained was between 50 and 60% in all samples. The reliability coefficients were between .80 and .85 and the mean varied from 3.23 and 3.72.

Block 7.1 Core self-evaluations

Regarding Core self-evaluations (Block 7.1 in the questionnaire), the analyses results are presented in Tables A.7.1.1 through A.7.1.4. These scales were not included in Sample 4.

The measure of *Self-Esteem (Est)* showed satisfactory measurement properties, with variance explained around 40%, and reliabilities above .80. At Time 2 between 36 and 46% of the variance was accounted. All reliability coefficients are in the high 80s, and the means levels are fairly similar around 4. A one-factor solution had to be specified in all samples at both time points.

The scale measuring *Self-Efficacy (Ef)* had to be forced into a one-factor solution in all samples at both time points as well. However, this factor exhibited

satisfactory measurement properties, with loadings above .40 and reliabilities above .80 in all samples. At Time 2 the variance explained was slightly above or around 40%. The reliability coefficients were also similar in all samples (around .85), and the means were between 4.22 and 4.31.

As can be seen in Table A.7.1.3, the scale measuring *Locus of control (Lo)* included one item, Lo01, which did not perform well. This was due to translation problems, and this item had to be removed from the scale. The scale explained little variance (between 25 and 28 % of the total item variance), and showed low reliabilities (.69 – 72) across all samples. At Time 2 the problems with item Lo01 had been remedied, and it was included in the scale. Still, the variance explained was rather low in all samples (<.27) and some of the factor loadings were lower than .40. The reliabilities are all around .70. There were no huge differences between samples in the mean levels, which are around 3.85. A one-factor solution had to be specified in all samples at both time points.

The scale measuring *Neuroticism (Ne*; Table A.7.1.4) exhibited satisfactory measurement properties after a one-factor solution was specified in all samples at both time points. Factor loadings for all items were above .40, with the exception of item Ne12 in Sample 3. Reliabilities ranged between .86 and .89. At Time 2 the variance explained was rather low (<.40), but reliability coefficients were found around .88. The factor loadings were acceptable in all samples. The mean levels were similar, around to 2.00.

Block 7.2 HP5i

Five different personality measures were included in the questionnaire (Block 7.2) for all samples. The measurement properties of these scales are presented in Tables A.7.2.1 through A.7.2.5.

According to Table A.7.2.1, the scale measuring *Agreeableness (Pag)* exhibited rather low factor loadings in Sample 1, however, these were still above .40, and the internal consistencies were between .6 and .75 in the three samples. This should be taken into account when using this scale. At Time 2 the variance explained was around 37% in all samples and the reliability coefficients were just around .69. Factor loadings were satisfactory in all samples. Mean levels varied from 2.10 to 2.41.

The *Conscientiousness scale (Pco)* exhibited good measurement properties, with strong loadings for most items and reliabilities between .77 and .83 in the four samples. At Time 2 the good measurement properties remain, the variance accounted for was between 48 and 57%. The Cronbach's alpha reliability coefficients were all between .78 and .84. The mean levels varied between 2.37 and 2.61.

The scale measuring *Extraversion (Pex)* consisted of six items. The scale has been modified since published, and one of the new items, pex01, did not exhibit

adequate measurement properties, and was removed from the scale, and is not included in the Table A.7.2.3. However, in our samples item Pex06 seemed more problematic, with loadings below .40 Sample 1 and 3. Reliabilities ranged between .66 and .71. At Time 2 item the same five items were used. The solution accounted for between 35 and 42% of the variance. The reliability coefficients were between .72 and .76. The mean values were between 3.89 and 4.04.

The scale measuring *Neuroticism (Pne)* exhibited moderately acceptable measurement properties, with item Pne04 being problematic in Sample 1. Reliabilities ranged between .65 and .70, which should be taken into account when using this scale. At Time 2 the variance explained variance was approximately 36% in all samples and the reliability coefficients were similar and around .66. The mean levels ranged between 2.36 and 2.75.

The scale measuring *Openness (Pop)* exhibited measurement properties similar to Pne, with acceptable but low factor loadings and reliabilities ranging between .61 and .71. At Time 2 between 30 and 36% of the variance was explained. Item Pop04 exhibited a loading lower than .40 in Sample 2. Cronbach's alpha levels were between .60 and .67. The mean levels were between 2.14 and 2.52.

Block 8.1 Mental health complaints

Table A.8.1.1 presents the results from factor and reliability analyses regarding Block 8.1, *Mental health complaints (Ghq)*, which was not measured in Sample 4. This construct was measured using the short version of the General Health Questionnaire, GHQ. A one-factor solution had to be specified in all samples at both time points. At Time 1 the scale reliability was satisfactory in all samples, ranging from .84 to .87. However, one particular item, Gh03, had rather low factor loadings in Sample 1 and Sample 2, and the scale explained moderate portions of variance across samples (below 40%). Similar measurement properties were found At Time 2, where around 30% of the variance was explained, and reliabilities were .83 or .84. The mean levels were low in all samples, between 0.36 and 0.39 on a 0-3 scale.

Block 8.2 Depressive symptoms

A *Depression (Mdi)* scale was also used in the questionnaire, presented in Block 8.2. The results regarding this scale are presented in Table A.8.2.1. A one-factor solution had to be specified in all samples at both time points. As can be seen, the measurement properties of this scale at Time 1 are quite satisfactory (reliability around .90). The same applies for Time 2, reliabilities slightly above.90, and explained variance around 40%. In connection with this scale, we asked respondents if their reported depression related problems had caused them considerable suffering during the past couple of weeks. As can be seen in Table

A.8.2.2, between 11 and 26 % of the respondents answered yes to this question at Time 1, and between 11 and 28% at Time 2. Mean levels were low, between 1.52 and 1.67 on a scale ranging between 1 and 4.

Block 9 Somatic health complaints

Block 9 in the questionnaire included a measure for *Somatic health complaints (Hb)*. Table A.9.1 presents measurement properties for this scale. A one-factor solution had to be specified in all samples at both time points. Reliability coefficients were above the commonly used threshold of .70 across all samples, however, several factor loadings (for example items Hb01, Hb02, Hb09, and Hb10) were below .40 in some samples. At Time 2 the internal consistency was .73 or above, and the mean levels ranged from 1.65 to 1.93. On average 28% of the variance was explained, but a few items (for example items Hb02, Hb08, Hb09, and Hb10) loaded below .40 on the factor.

Block 10 Life outside work

As for Block 10 in the questionnaire (Sleeping problems, Pharmaceutical intakes, and dietary habits), Table A.10.1 shows results regarding factor and reliability analysis for the scale measuring *Sleeping problems (Sk).* The measurement properties of this scale were quite good. Reliabilities were all above .80 at both Time 1and 2, and the variance explained ranged between 59 and 65% at both time points. The mean levels at Time 2 were between 2.15 and 2.52.

Table A.10.1.2 shows descriptive statistics for a single item about *Difficulties waking up (Sk02)*. There were no great different in mean levels or frequency distribution between samples or over time.

Tables A.10.2 through A.10.9 present frequencies and descriptive statistics for *Use of medication (Lkm)* and *Dietary habits (Ma)*. Only marginal differences were detected across samples or over time on these measures.

Block 11 Health behavior

Results relating to Block 11 in the questionnaire, Health behavior – *Exercise (Mo), Tobacco use (To) and Alcohol habits (Al)* – are presented in Tables A.11.1 through A.11.7 as frequency distributions and descriptive statistics. As was the case with Block 10, no striking differences between samples were identified on these measures.

Item Al01 was only used in Sample 2, since the information given by answering this item was included in Al02 in the other samples.

Block 12 House work

The Ah-items all measure to what extent the respondent has the main responsibility for different house chores. These chores are presented in Tables

A.12.1-A.12.3, and have been grouped in Household chores, House maintenance, and Childcare.

Table A.12.1 shows the scale properties *for Household chores (Ah1).* Factor loadings were consistently high, variance explained close to two thirds, and reliabilities above .90, indicating a consistent and reliable measure. At Time 2 similar measurement properties were found, the reliability levels were identical (except Sample 3 which changed from .88 to .89), and the variance explained was the around 60%. Mean levels ranged between 3.13 and 3.70.

Table A.12.2 presents the properties for the scale measuring *House maintenance (Ah1)* showed slightly lower reliabilities, ranging from .75 to .82, and the pattern of factor loadings was a little less consistent. However, the measure still appears consistent, and 50% of the variance was explained. At Time 2 the pattern of factor loadings was similar to Time 1 and reliabilities and variance explained was essentially the same. Mean levels ranged between 3.05 and 3.92.

The scale measuring to what extent the respondents had the main responsibility for *Childcare (Ah3)* contained a greater degree of missing responses, since not all the respondents had children. The scale still exhibited adequate measurement properties, with reliabilities between .75 and .85, and high factor loadings. At Time 2 similar measurement properties were found, and the mean levels ranged between 3.02 and 3.39.

Concluding remarks

The objective of this report was to describe the data collection in the project "The salaried employee in the modern working life: Threats and challenges", and to document the measurement properties of the scales used in the questionnaire. The sample characteristics are described, along with the process of data collection, and response rates, for both time points.

The scales used in this questionnaire are for the most part adequate or more than adequate in terms of internal consistency and factor structure. Some scales presented some problems, however, and it is recommended that these problems are taken into account when data collected with these scales are used. Especially problematic were some of the Coping dimensions, namely Accommodation and Symptom reduction. This may be explained by the scales being translated and have not yet been totally validated in the Swedish context. However, some of the dimensions were adequate in some samples, but not in others, suggesting that there may be other mechanisms contributing to the problems with the scale. Perhaps the scale is context dependent, and less appropriate for some samples than others.

It was especially encouraging to see that the scales developed for the purposes of this study, the three Social support dimensions, Pf, and Qk all exhibited more than adequate measurement properties. They still need to be validated in relation to other measures, but these initial results are encouraging.

A comparison between Time 1 and Time 2 properties showed that in general very changes could be observed in mean levels, factor loadings, and reliabilities. Even if no significance testing of stability was conducted, it appears that the structures of the scales are relatively stable, and that only minor changes in absolute levels of the variables measured can be observed in the four samples. Nor were there any alarmingly high or low levels of the different variables measured. The samples reported very good health, moderate stress levels, and a reasonable working climate. There are nevertheless variations within the samples, which suggest that more sophisticated analyses can uncover some interesting relationships between predictors and outcomes. The longitudinal design, and the high longitudinal response rate (above 70% in all samples), enable interesting analyses of relationships between variables over time. The project aims at investigating a number of different research questions relating to the contemporary working life, including factors which are related to subsequent health, buffers against the impact of stressors, the impact of life outside work on well-being, the balance between work and life outside work and the impact of this balance on attitudes and well-being, and many other research questions, indicated by Figure 1.

However, in order to conduct quantitative research on any research questions, it is important that the measures use are satisfactory, and the present report suggest that, with only a few exceptions, are up to commonly used standards of measurement quality.

References

Allen, N.J., & Meyer, J.P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology,* 63, 1-18.

Allvin, M., Aronsson, G., Hagström, T., Johansson, G., Lundberg, U., & Skärstrand, E. (1998). *Gränslöst arbete eller arbetets nya gränser.* Arbete och Hälsa, 1998:21. Stockholm: Arbetslivsinstitutet.

Allvin, M., Wiklund, P., Härenstam, A., & Aronsson, G. (1999). *Frikopplad eller frånkopplad: Om innebörder och konsekvenser av gränslösa arbeten.* Arbete och Hälsa 1999:2. Stockholm: Arbetslivsinstitutet.

Andersson, K. (1986). Utveckling och prövning av ett frågeformulärsystem rörande arbetsmiljö och hälsotillstånd [Development and test of a questionnaire concerning work environment and health] (Rapport 2). Örebro: Yrkesmedicinska kliniken.

Ashford, S. J., Lee, C., & Bobko, P. (1989). Content, cause, and consequences of job insecurity: A theory-based measure and substantive test. *Academy of Management Journal,* 32(4), 803-829.

Babor, T.F., Higgins-Biddle, J.C., Saunders, J.B., & Monteiro, M.G. (2001). *AUDIT. The Alcohol Use Disorders Identification Test.* (2nd edition). Geneva: WHO.

Bäckman, O., & Edling, C. (2000). Arbetsmiljö och arbetsrelaterade besvär under 1990-talet. I S. Marklund (red.), *Arbetsliv och hälsa 2000* (pp. 125-152). Stockholm: Arbetslivsinstitutet.

Bandura, A & Locke E.A. (2003) Negative Self-Efficacy and Goal Effects Revisited *Journal of Applied Psychology,* 88, 87-99.

Bech, P., Rasmussen, N.-A., Raabaek Olsen, L., Noerholm, V., & Abildgaard, W. (2001). The sensitivity and specificity of the Major Depression Inventory, using the Present State Examination as the index of diagnostic validity. *Journal of Affective Disorders,* 66, 159–164.

Beehr, T.A., Walsh, J.T., & Taber, T.D. (1976). Relationship of stress to individually and organizationally valued states: Higher order needs as a moderator. *Journal of Applied Psychology*, 61, 41-47.

Brayfield, A.H., & Rothe, H.F. (1951). An index of job satisfaction. *Journal of Applied Psychology*, 35, 307-311.

Caplan, R.D. (1971). Organizational stress and individual strain: A social-psychological study of risk factors in coronary heart diseases among administrators, engineers, and scientists. Institute for Social Research, University of Michigan, University Microfilms No. 72/14822, Ann Arbor, Michigan.

Caplan, R.D., Cobb, S., French, J.R.P. Jr, Harrison, R.V., & Pinneau, S.R. (1975). *Job demands and worker health: Main effects and occupational differences*. Washington, DC: U.S. Government Printing Office.

Colquitt, J.A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology,* 86, 386–400.

Eriksson, A., Sverke, M., Hellgren, J., & Wallenberg, J. (2002). Lön som styrmedel. Konsekvenser för kommunanställdas attityder och prestation. *Arbetsmarknad & Arbetsliv*, 3, 205–219.

Eysenck, H.J. & Eysenck, S.B.G. (1968). *Manual for the Eysenck Personality Inventory.* San Diego, CA: Educational and Industrial Testing Service.

Goldberg, D. (1979). *Manual of the general health questionnaire*. London: NFER Nelson.

Guppy, A., Edwards, J.A., Brough, P., Peters-Bean, K.M., Sale, C., & Short, E. (2004). The psychometric properties of the short version of the Cybernetic Coping Scale: A multigroup confirmatory factor analysis across four samples. *Journal of Occupational and Organizational Psychology,* 77, 39-62.

Gustavsson, G., Svärdson, Å., Lagerström, M., Bruce, M., Christensson, A., Schüldt-Håård, U., & Omne-Pontén, M. (2006). Lust-studien: En landsomfattande longitudinell enkätstudie avsjuksköterskestudenters hälsoutveckling och karriärval under utbildningsåren och i mötet med arbetslivet. Urvalsram, kohorter och genomförande 2002-2005 [The Lust-study: A country-spanning longitudinal questionnaire study of nurse students' health development and carreer choices during the years of training and in the entry to working life]. Rapport från Institutionen för Omvårdnad, Karolinska Institutet.

Gustavsson, J.P., Jönsson, E.G., Linder, J., & Weinryb, R.M. (2003). The HP5 inventory: Definition and assessment of five health related personality traits from a five-factor model perspective. *Personality and Indidvidual Differences, 35*, 69–89.

Hackman, J.R., & Oldham, G.R. (1975). Development of the Job Diagnostic Survey. *Journal of Applied Psychology,* 60, 159-170.

Hall, D.T., & Hall, F.S. (1976). The relationship between goals, performance, self-image, and involvement under different organizational climates. *Journal of Vocational Behavior,* 9, 267-278.

Isaksson, K., Hellgren, J., & Pettersson, P. (1998). *Strukturomvandling inom svensk detaljhandel: Uppföljning av omorganisation och personalminskning i KF/KDAB* [Structural transformation in Swedish retail trade: Follow-up of a reorganization and layoff in KF/KDAB]. Reports from the Department of Psychology, Stockholm University, 97:1998.

Hellgren, J., Sjöberg, A., & Sverke, M. (1997). Intention to quit: Effects of job satisfaction and job perceptions, in F. Avallone, J. Arnold, & K. de Witte (Eds.), *Feelings work in Europe* (pp. 415-423). Milano: Guerini.

Hellgren, J., Sverke, M., & Isaksson, K. (1999). A two-dimensional approach to job insecurity: Consequences for employee attitudes and well-being. *European Journal of Work and Organizational Psychology,* 8, 179–195.

Hovmark, S., & Thomsson, H. (1995). *ASK - ett frågeformulär för att mäta arbetsbelastning, socialt stöd, kontroll och kompetens i arbetslivet* (Reports from the Department of Psychology 86). Stockholm: Stockholms universitet, Psykologiska institutionen.

Isaksson, K., & Johansson, G. (1997). Avtalspension med vinst och förlust: Konsekvenser för företag och medarbetare [Early retirement agreement for better or worse: Consequences for companies and workers]. Stockholm: Folksam.

Judge, T.A., Bono, J.E., Erez, A. Locke, E.A., & Thoresen, C.J. (2002). The scientific merit of valid measures of general concepts: Personality research and core self-evaluations. In J.M. Brett, & F. Drasgow (Eds.),*The psychology of work: Theoretically based empirical research,* (pp. 55-77). Mahwah, NJ: Lawrence Erlbaum Associates.

Judge, T. A., Locke, E. A., Durham, C. C., & Kluger, A. N. (1998). Dispositional effects on job and life satisfaction: The role of core evaluations. *Journal of Applied Psychology,* 83(1), 17-34.

Judge, T.A. & Welbourne, T.M. (1994). A confirmatory investigation of the dimensionality of the pay satisfaction questionnaire. *Journal of Applied Psychology,* 3, 461–466.

Levenson, H. (1981). Differentiating among internality, powerful others, and chance. In H.M. Lefourt (Ed.), *Research with the locus of control construct* (pp. 15-63). New York: Academic Press

Mårdberg, B., Lundberg, U., & Frankenhaeuser, M. (1991). The total workload of parents employed in white collar jobs: construction of a questionnaire and a scoring system. *Scandinavian Journal of Psychology,* 32, 233-239.

Mellor, S., Mahieu, J.E., & Swim, J.K.(1994). Cross-level analysis of the influence of local union structure on women's and men's union commitment. *Journal of Applied Psychology,* 79, 203-210.

Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of work-family conflict and family-work conflict scales. *Journal of Applied Psychology,* 81(4), 400-410.

Probst, T. M., & Brubaker, T. L. (2001). The effects of job insecurity on employee safety outcomes: Cross-sectional and longitudinal explorations. *Journal of Occupational Health Psychology,* 6, 139-159.

RFV 2002:4. Långtidssjukskrivningar för psykisk sjukdom och utbrändhet: Vilka egenskaper och förhållanden är utmärkande för de drabbade? Stockholm: Riksföräkringsverket.

Rizzo, J.R., House, R.J., & Lirtzman, S.I. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly,* 15, 150-163.

Robinson, S.L. (1996). Trust and breach of the psychological contract. *Administrative Science Quarterly,* 41, 574–599.

Rosenberg, M. (1965). *Society and the adolescent self-image.* Princeton, NJ: Princeton University Press.

Sjöberg, A. & Sverke, M. (2000). The interactive effect of job involvement and organizational commitment on job turnover revisited: A note on the mediating role of turnover intention. *Scandinavian Journal of Psychology,* 3, 247–252.

SOU 2002:5 Handlingsplan för ökad hälsa i arbetslivet: Mål, ansvar och åtgärder från ett övergripande mål för människor i arbete- Del 1: Slutbetänkande. Stockholm: Fritze.

Sverke, M. & Sjöberg, A. (1994). Dual commitment to company and union in Sweden: An examination of predictors and taxonomic split methods. *Economic and Industrial Democracy,* 15, 531-564.

Sverke, M., Hellgren, J., & Öhrming, J. (1999). Organizational restructuring and health care work: A quasi-experimental study. In P. M. le Blanc, M. C. W. Peeters, A. Büssing & W. B. Schaufeli (Eds.), *Organizational psychology and health care: European contributions* (pp. 15-32). München: Rainer Hampp Verlag.

van der Vliet, C. & Hellgren, J. (2002). *The modern working life: Its impact on employee attitudes, performance and health.* (SALTSA report 4 2002). Sweden, National Institute for Working Life & SALTSA.

Walsh, J.T., Taber, T.D., & Beehr, T.A. (1980). An integreted model of perceived job characteristics. *Organizational Behavior and Human Performance*, *25*, 252-267.

Westerlund, H., Ahlberg-Hultén, G., Alfredsson, L., Hertting, A., & Therorell, T. (2000). Krav och kontroll i magra organisationer. I K. Barklöf (red.), *Magra organisationer i arbetslivet: Smärtgränsen?.* Rådet för arbetslivsforskning, RALF.

Summary

Näswall, K., Baraldi, S., Richter, A., Hellgren, J., & Sverke, M. The salaried employee in the modern working life: Threats and challenges. Technical report on the sample, data collection, and measurement properties of the instruments.

The present report presents data collected within a project focusing on salaried employees, among whom we have witnessed profound changes both in the conditions under which work is carried out and in the reported frequencies of psychological health complaints. The aim has been to capture traditional and new demands that have previously not been the focus of empirical studies, as well as to investigate what factors related to attitudes, behavior, and well-being among salaried workers. The project has consisted in a longitudinal data collection among white-collar workers in four Swedish organizations. Documentation on the procedure, samples, and questionnaire items is presented in the present technical report, along with measurement properties and descriptive statistics at both time points for the scales used. The results indicate that the measures are for the most part satisfactory, and the report provides a solid basis for future research on the data collected in this project.

Appendix

Block 1

Table A.1.1. Distribution over the different offices (only in sample 2)

Lgt01	Distribution of persons over offices N(%)	Time 1 Sample 2		Time 2 Sample 2	
		N	%	N	%
	Stockholm Plan 2	25	4.9	20	4.2
	Stockholm Plan 3	29	5.7	23	4.8
	Stockholm Plan 5	22	4.3	18	3.8
	Stockholm Plan 6	-	-	15	3.1
	Stab	14	2.8	15	3.1
	Corporate Finance	8	1.6	5	1.0
	Skatt	21	4.1	16	3.3
	Göteborg	30	5.9	30	6.3
	Malmö	13	2.6	8	1.7
	Helsingborg	12	2.4	11	2.3
	Kristianstad	11	2.2	12	2.5
	Västerås	19	3.7	21	4.4
	Eskilstuna	17	3.3	16	3.3
	Nyköping	15	3.0	18	3.8
	Lindesberg	-	-	3	0.6
	Örebro	22	4.3	19	4.0
	Karlstad	22	4.3	15	3.1
	Borlänge	-	-	5	1.0
	Uppsala	23	4.5	21	4.4
	Norrköping	14	2.8	14	2.9
	Linköping	25	4.9	25	5.2
	Jönköping	20	3.9	15	3.1
	Visby	-	-	4	0.8
	Östersund	23	4.5	27	5.6
	Sundsvall	16	3.1	12	2.5
	Luleå	12	2.4	11	2.3
	Umeå	11	2.2	11	2.3
	Gävle	16	3.1	17	3.6
	Sandviken	-	-	7	1.5
	Falun	15	3.0	14	2.9
	Övriga	51	10.0	30	6.3

Table A.1.2. Closest manager (only in sample 2, Time 2)

Lgt02	Which manager do you report to?	Sample 2
	Office manager	92.7
	Sector manager north of Sweden	2.9
	Sector manager south of Sweden	2.7
	CEO	1.7

Block 2: Work-climate

Table A.2.1. Factor analysis results, reliability, and descriptive statistics for the scale measuring competency demands

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Lkr01	I am expected to develop my competence	.74	.80	.92	.76	.83	.85	.86	.76
Lkr02	The nature of my works means I continually have to develop myself and learn to think in new ways.	.64	.71	.66	.55	.75	.67	.68	.65
Lkr03	I feel pressure to continually learn in order to manage my work task	.59	.65	.57	.62	.65	.63	.65	.63
Eigenvalue		1.30	1.56	1.61	1.27	1.66	1.57	1.63	1.40
Variance explained		43.24	52.07	53.71	42.46	55.45	52.36	54.25	46.81
α		.70	.76	.75	.68	.78	.76	.77	.72
N		317	507	404	441	201	480	324	359
M		3.18	3.56	3.33	3.50	3.18	3.63	3.31	3.52
SD		0.81	0.94	0.91	0.81	0.86	0.88	0.93	0.84

Note: Measured on a 1-5 scale.

Table A.2.2. Factor analysis results, reliability, and descriptive statistics for the scale measuring Goal Clarity

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Mk01	I know exactly what is expected of me	.84	.74	.74	.74	.84	.75	.71	.72
Mk02	Explanation is clear of what has to be done	.80	.87	.83	.76	.85	.82	.89	.82
Mk03	I know what my responsibilities are	.77	.79	.71	.70	.75	.78	.64	.65
Mk04	There exist no clear, planned goals and objectives for my job (R)	.64	.67	.64	.59	.70	.67	.66	.58
Eigenvalue		2.34	2.38	2.14	1.96	2.48	2.29	2.14	1.94
Variance explained		58.56	59.45	53.50	48.99	61.91	57.21	53.42	48.59
α		.85	.85	.82	.79	.86	.84	.81	.78
N		317	507	404	441	201	480	323	358
M		3.48	3.95	3.71	3.75	3.61	3.98	3.80	3.74
SD		0.90	0.81	0.87	0.83	0.91	0.76	0.85	0.79

Note: Measured on a 1-5 scale.

Table A.2.3. Factor analysis results, reliability, and descriptive statistics for the scale measuring Role Conflict

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Rf01	I receive incompatible requests from two or more people	.75	.75	.68	.67	.80	.67	.80	.66
Rf02	I have to do things that should be done differently	.62	.59	.62	.68	.54	.70	.71	.62
Rf03	I have to buck a rule or policy in order to carry out an assignment	.58	.53	.63	.60	.63	.67	.63	.67
Rf04	I do things that are apt to be accepted by one person and not accepted by others	.47	.54	.49	.41	.41	.61	.53	.42
Rf05	I receive an assignment without adequate resources and materials to execute it	.79	.75	.79	.67	.76	.74	.74	.80
Eigenvalue		2.13	2.05	2.11	2.10	2.08	2.31	2.37	2.10
Variance explained		42.69	41.01	42.22	42.00	41.57	46.28	47.49	41.98
α		.78	.77	.78	.77	.76	.81	.81	.77
N		317	507	404	441	201	480	324	359
M		2.42	1.96	2.29	2.33	2.37	2.01	2.23	2.37
SD		0.85	0.76	0.85	0.87	.81	0.81	0.88	0.85

Note: Measured on a 1-5 scale.

Table A.2.4. Factor analysis results, reliability, and descriptive statistics for the scale measuring Quantitative Role overload

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Be01	I am given enough time to do what is expected of me in my job (R)	.86	.75	.85	.76	.78	.58	.75	.78
Be02	It fairly often happens that I have to work under a heavy time pressure	.62	.67	.69	.72	.61	.70	.77	.68
Be03	I often have too much to do in my job	.71	.67	.76	.81	.82	.79	.77	.84
Eigenvalue		1.62	1.45	1.77	1.75	1.65	1.45	1.76	1.79
Variance explained		53.96	48.37	59.13	58.23	55.07	48.49	58.72	59.62
α		.77	.74	.81	.81	.78	.73	.81	.81
N		317	508	405	440	201	481	324	359
M		3.37	3.28	3.49	3.56	3.28	3.27	3.43	3.55
SD		0.93	0.90	1.01	0.98	0.90	0.88	1.00	0.97

Note: Measured on a 1-5 scale.

Table A.2.5. Factor analysis results, reliability, and descriptive statistics for the scale measuring Qualitative Role overload

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Kb01	I feel unreasonable demands in my work	.67	.74	.68	.72	.64	.71	.70	.72
Kb02	I consider my responsibilities as unreasonable	.57	.68	.71	.72	.62	.72	.64	.70
Kb03	I have work demands that are difficult to accomplish	.57	.72	.63	.71	.63	.66	.72	.69
Kb04	My work contains elements that are too demanding	.66	.60	.56	.59	.68	.57	.59	.64
Eigenvalue		1.54	1.90	1.68	1.89	1.65	1.78	1.78	1.90
Variance explained		38.52	47.54	41.87	47.35	41.31	44.29	44.51	47.54
α		.71	.78	.74	.78	.74	.76	.76	.78
N		317	506	405	440	201	481	324	358
M		2.17	1.97	2.37	2.64	2.14	2.06	2.36	2.62
SD		0.73	0.77	0.89	0.98	0.75	0.75	0.87	0.96

Note: Measured on a 1-5 scale.

Table A.2.6. Factor analysis results, reliability, and descriptive statistics for the scale measuring Interpersonal conflicts

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Pk01	My work is hampered by the existence of power struggles and territorial thinking at my workplace	.77	.70	.80	.77	.80	.73	.80	.74
Pk02	Intrigues in my working place impair the work climate	.74	.84	.81	.85	.71	.86	.78	.84
Pk03	There are a great deal of tension on the work place due to prestige and conflicts	.97	.95	.94	.89	.95	.94	.92	.95
Eigenvalue		2.09	2.10	2.19	2.11	2.05	2.17	2.10	2.16
Variance explained		69.59	69.92	72.85	70.38	68.52	72.21	70.00	71.97
α		.86	.87	.89	.88	.86	.88	.87	.88
N		317	505	405	440	201	481	324	359
M		2.64	2.28	2.45	2.62	2.48	2.07	2.34	2.58
SD		1.17	1.16	1.26	1.21	1.15	1.09	1.20	1.17

Note: Measured on a 1-5 scale.

Table A.2.7. Factor analysis results, reliability, and descriptive statistics for the scale measuring Control

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Po01	I have enough power in this organization to control events that might affect my job	.75	.75	.76	.73	.67	.81	.79	.74
Po02	In this organization I can prevent negative things from events that might affect my job	.26	.67	.06	-.02	.25	.64	-.001	.01
Po03	I understand this organisation well enough to be able to control things that affect me	.87	.80	.76	.73	.85	.77	.79	.73
Eigenvalue		1.38	1.65	1.16	1.07	1.23	1.66	1.26	1.09
Variance explained		45.92	55.02	38.55	35.63	40.95	55.47	41.98	36.27
α		.62	.78	.46	.38	.58	.78	.44	.41
N		315	506	406	439	198	480	324	356
M		3.09	2.89	3.38	3.38	3.14	2.99	3.39	3.38
SD		0.81	0.90	0.74	0.70	0.78	0.88	0.72	0.69

Note: Measured on a 1-5 scale.

Table A.2.8. Factor analysis results, reliability, and descriptive statistics for the scale measuring Autonomy

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Au01	I have satisfactory influence over decisions concerning my job	.64	.77	.72	.75	.65	.72	.76	.73
Au02	I can make my own decisions on how to organize my work	.68	.67	.66	.60	.69	.57	.70	.61
Au03	There is scope for me to take own initiatives in my work	.67	.62	.67	.64	.71	.63	.69	.66
Au04	I have a job where I can really prove my ability	.77	.69	.69	.68	.73	.72	.72	.66
Eigenvalue		1.92	1.89	1.88	1.81	1.93	1.74	2.06	1.78
Variance explained		47.94	47.29	46.92	45.28	48.32	43.56	51.59	44.59
α		.79	.78	.78	.77	.79	.75	.81	.76
N		315	506	405	437	198	481	323	357
M		3.63	3.73	3.74	3.81	3.67	3.73	3.80	3.79
SD		0.73	0.72	0.74	0.69	0.74	0.69	0.76	0.67

Note: Measured on a 1-5 scale.

Table A.2.9. Factor analysis results, reliability, and descriptive statistics for the scale measuring Task completion ambiguity

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Pf01	I determine when my work assignments are completed (R)	.76	.80	.81	.79	.82	.85	.79	.78
Pf02	I know when a task is completed (R)	.59	.73	.65	.69	.74	.79	.68	.67
Pf03	I can decide if my work assignment is finished or not (R)	.79	.77	.79	.73	.84	.84	.79	.74
Pf04	It is up to me to assess when my work assignment is completed (R)	.70	.76	.72	.69	.69	.82	.78	.74
Eigenvalue		2.05	2.35	2.22	2.10	2.39	2.72	2.31	2.16
Variance explained		51.16	58.67	55.52	52.52	59.86	67.92	57.84	53.95
α		.80	.85	.83	.81	.85	.89	.84	.82
N		315	507	406	439	198	481	324	357
M		2.11	1.86	1.88	1.88	1.98	1.96	1.87	1.93
SD		0.68	0.73	0.72	0.70	0.68	0.77	0.73	0.69

Note: Measured on a 1-5 scale.

Table A.2.10. Factor analysis results, reliability, and descriptive statistics for the scale measuring Task quality ambiguity

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Qk01	I know when I have done good work (R)	.84	.91	.86	.82	.84	.92	.83	.93
Qk02	I can sense when I have carried out a job well (R)	.93	.93	.89	.84	.87	.94	.88	.90
Qk03	I can judge the quality of my work (R)	.35	.60	.57	.41	.52	.62	.53	.51
Qk04	When my work is carried out well, I can feel it (R)	.79	.83	.70	.78	.71	.84	.83	.77
Eigenvalue		2.30	2.73	2.35	2.16	2.23	2.82	2.44	2.53
Variance explained		57.53	68.15	58.65	53.90	55.78	70.58	60.89	63.25
α		.81	.89	.84	.80	.82	.90	.85	.85
N		315	506	405	437	199	480	323	358
M		2.03	2.08	1.93	1.78	2.01	2.09	1.84	1.81
SD		0.65	0.78	0.67	0.62	0.64	0.78	0.66	0.64

Note: Measured on a 1-5 scale.

Table A.2.11. Factor analysis results, reliability, and descriptive statistics for the scale measuring Job Challenge

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Lk01	I'm learning new things all the time in my job	.74	.83	.66	.71	.780	.91	.74	.72
Lk02	My work is characterised by change and variation	.68	.64	.72	.61	.69	.55	.72	.65
Lk03	My work requires continual involvement	.37	.60	.39	.19	.48	.62	.16	.14
Lk04	I have opportunities for personal development	.69	.65	.59	.52	.69	.61	.56	.66
Eigenvalue		1.63	1.88	1.46	1.19	1.82	1.90	1.41	1.40
Variance explained		40.61	47.06	36.42	29.66	45.39	47.52	35.30	34.99
α		.71	.77	.68	.57	.76	.76	.61	.60
N		315	505	406	439	198	480	324	357
M		3.33	3.74	3.54	3.48	3.33	3.81	3.62	3.57
SD		0.75	0.79	0.75	0.65	0.78	0.77	0.69	0.64

Note: Measured on a 1-5 scale. A one-factor solution had to be specified in Sample 4.

Table A.2.12. Factor analysis results, reliability, and descriptive statistics for the scale measuring Feedback

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Kr01	I usually know whether or not my work is satisfactory on this job	.86	.92	.86	.89	.89	.89	.85	.91
Kr02	I have a pretty good idea of whether or not I *am* performing my job sufficiently well	.89	.90	.89	.88	.91	.92	.91	.89
Kr03	I often have trouble figuring out whether I'm doing well or poorly on this job (R)	.55	.47	.52	.55	.46	.35	.44	.52
Kr04	My boss gives me a pretty good idea of how well I'm performing my job	.87	.88	.87	.87	.79	.85	.91	.81
Eigenvalue		2.59	2.65	2.55	2.62	2.45	2.49	2.58	2.56
Variance explained		64.67	66.35	63.81	65.61	61.34	62.32	64.60	63.96
α		.87	.87	.86	.87	.84	.83	.85	.86
N		315	502	406	439	198	476	324	356
M		2.95	3.08	3.17	3.13	3.06	3.05	3.36	3.12
SD		0.95	1.01	1.04	1.03	0.92	0.92	1.00	0.98

Note: Measured on a 1-5 scale.

Table A.2.13. Factor analysis results, reliability, and descriptive statistics for the scale measuring Communication

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Lri01	My manager has an open communication with me.	.78	.78	.81	.78	.74	.76	.79	.75
Lri02	My manager explains clearly and comprehensively when I need it	.79	.76	.82	.85	.89	.77	.83	.84
Lri03	My managers explanations are good and satisfying	.86	.86	.83	.90	.85	.82	.88	.88
Lri04	My manager provides necessary information in due time.	.77	.71	.77	.76	.80	.73	.72	.83
Lri05	The manager caters to my needs in terms of information	.80	.83	.83	.79	.85	.80	.85	.80
Eigenvalue		3.22	3.12	3.28	3.34	3.42	3.02	3.33	3.37
Variance explained		64.33	62.49	65.59	66.85	68.32	60.45	66.58	67.46
α		.90	.89	.91	.91	.91	.88	.91	.91
N		315	502	405	436	198	476	323	356
M		3.01	3.16	3.16	3.14	3.04	3.17	3.32	3.12
SD		0.95	0.93	0.98	1.00	0.95	0.88	0.99	0.96

Note: Measured on a 1-5 scale.

Table A.2.14. Factor analysis results, reliability, and descriptive statistics for the scale measuring Feedback from project manager. Sample 2 only, items are recognized by the "u" after the item code.

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Kr01u	I usually get to know from my project manager whether or not my work is satisfactory on this job	-	.94	-	-	-	.91	-	-
Kr02u	I have a pretty good idea of whether or not I am performing my job sufficiently well	-	.91	-	-	-	.93	-	-
Kr03u	I often have trouble figuring out whether I'm doing well or poorly on this job (R)	-	.44	-	-	-	.33	-	-
Kr04u	My project manager gives me a pretty good idea of how well I'm performing my job	-	.89	-	-	-	.85	-	-
Eigenvalue		-	2.69	-	-	-	2.52	-	-
Variance explained		-	67.15	-	-	-	63.09	-	-
α		-	.87	-	-	-	.83	-	-
N		-	308	-	-	-	272	-	-
M		-	3.10	-	-	-	3.25	-	-
SD		-	0.90	-	-	-	0.82	-	-

Note: Measured on a 1-5 scale.

Table A.2.15. Factor analysis results, reliability, and descriptive statistics for the scale measuring Communication with Project manager. Sample 2 only, items are recognized by the "u" after the item code.

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Lri01u	My project manager has an open communication with me.	-	.77	-	-	-	.73	-	-
Lri02u	My project manager explains clearly and comprehensively when I need it	-	.80	-	-	-	.84	-	-
Lri03u	My project managers explanations are good and satisfying	-	.85	-	-	-	.86	-	-
Lri04u	My project manager provides necessary information in due time.	-	.73	-	-	-	.75	-	-
Lri05u	The project manager caters to my needs in terms of information	-	.76	-	-	-	.73	-	-
Eigenvalue		-	3.06	-	-	-	3.06	-	-
Variance explained		-	61.21	-	-	-	61.35	-	-
α		-	.89	-	-	-	.89	-	-
N		-	308	-	-	-	272	-	-
M		-	3.24	-	-	-	3.31	-	-
SD		-	0.77	-	-	-	0.78	-	-

Note: Measured on a 1-5 scale.

Block 3: Organizational characteristics

Table A.3.1. Factor analysis results, reliability, and descriptive statistics for the scale measuring Job insecurity (Quantitative)

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Ko01	I am worried that I will have to leave my job before I would like to	.84	.79	.81	.87	.81	.88	.77	.82
Ko02	I worry about being able to keep my job	.92	.97	.82	.85	.84	.92	.90	.87
Ko03	I am afraid I may loose my job in the near future	.92	.92	.90	.92	.94	.95	.93	.94
Eigenvalue		2.40	2.41	2.13	2.33	2.23	2.53	2.25	2.32
Variance explained		79.86	80.42	71.13	77.57	74.34	84.50	75.04	77.39
α		.92	.92	.88	.91	.89	.94	.90	.91
N		315	506	406	439	198	479	323	356
M		1.93	1.74	1.74	1.79	1.86	1.64	1.63	1.72
SD		0.93	0.99	0.97	1.01	0.90	0.93	0.90	0.98

Note: Measured on a 1-5 scale.

Table A.3.2. Factor analysis results, reliability, and descriptive statistics for the scale measuring Job insecurity (Qualitative)

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Ka01	I think my future prospects within the organization are good (R)	.64	.62	.60	.45	.48	.62	.65	.55
Ka02	I feel worried about my career development within the organization	.81	.78	.81	.71	.88	.77	.84	.80
Ka03	I worry about my future wage development	.62	.65	.63	.58	.71	.64	.59	.64
Ka04	I worry about getting less stimulating work tasks in the future	.69	.70	.76	.72	.71	.72	.75	.68
Eigenvalue		1.93	1.91	1.97	1.57	2.01	1.91	2.04	1.80
Variance explained		48.14	47.74	49.19	39.18	50.26	47.66	50.94	45.10
α		.78	.78	.79	.71	.78	.78	.80	.76
N		315	506	406	439	198	479	324	356
M		2.83	2.54	2.55	2.52	2.70	2.45	2.38	2.49
SD		0.96	0.95	0.97	0.87	0.93	0.90	0.97	0.90

Note: Measured on a 1-5 scale.

Table A.3.3. Factor analysis results, reliability, and descriptive statistics for the scale measuring Gender Equity

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Jm01	Equal opportunities between men and women exist at my work place	.94	.93	.91	.91	.95	.95	.89	.91
Jm02	When positions are being appointed it doesn't matter if the applicant is a man or a woman	.58	.50	.32	.48	.57	.48	.31	.53
Jm03	I believe men and women are treated equally at my work place.	.90	.95	.88	.96	.95	.96	.93	.88
Jm04	Men and women are treated equally when the wages are set	.68	.76	.72	.73	.80	.76	.73	.75
Eigenvalue		2.49	2.60	2.22	2.51	2.77	2.63	2.28	2.45
Variance explained		62.34	65.06	55.43	62.79	69.28	65.79	56.92	61.22
α		.85	.86	.79	.85	.89	.86	.79	.85
N		308	494	403	437	194	472	324	353
M		3.12	3.46	3.15	3.41	3.18	3.49	3.23	3.43
SD		0.92	1.02	0.95	1.00	0.99	0.95	0.96	0.94

Note: Measured on a 1-5 scale.

Table A.3.4. Factor analysis results, reliability, and descriptive statistics for the scale measuring Centralization

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Ce01	Employees are encouraged to participate when important decisions are made in this organization (R)	.94	.99	.90	.85	.92	.94	.99	.96
Ce02	Employees are encouraged to speak up when they disagree with a decision concerning the organization (R)	.69	.69	.67	.67	.79	.72	.65	.72
Ce03	Only people in managerial positions are involved when it comes to organizational decisions	.58	.57	.49	.51	.56	.52	.45	.47
Eigenvalue		1.69	1.78	1.49	1.43	1.77	1.68	1.63	1.66
Variance explained		56.18	59.21	49.74	47.61	59.09	55.90	54.23	55.46
α		.77	.78	.72	.71	.79	.76	.72	.75
N		314	501	405	439	197	480	324	356
M		3.56	3.27	2.97	2.86	3.47	3.14	2.83	2.88
SD		0.94	1.00	0.99	0.97	0.93	0.96	0.93	0.96

Note: Measured on a 1-5 scale.

Table A.3.5. Factor analysis results, reliability, and descriptive statistics for the scale measuring Trust

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Tr01	I can expect my employer to treat me in a consistent and predictable fashion	.78	.82	.76	.79	.80	.80	.87	.84
Tr02	My employer is always reliable	.84	.91	.89	.88	.85	.88	.87	.91
Tr03	My employer is open and honest with me	.85	.89	.86	.89	.85	.88	.88	.89
Tr04	I am sure that I can trust my employer	.77	.79	.73	.80	.79	.85	.68	.82
Tr05	I have complete confidence in my employer	.87	.93	.91	.93	.91	.92	.93	.89
Eigenvalue		3.39	3.76	3.49	3.69	3.52	3.78	3.63	3.80
Variance explained		67.80	75.16	69.70	73.84	70.39	75.56	72.62	75.99
α		.91	.94	.92	.93	.92	.94	.93	.94
N		313	504	404	439	197	479	321	356
M		3.11	3.35	3.23	3.07	3.21	3.33	3.37	3.13
SD		0.88	0.97	0.97	1.05	0.89	0.90	0.96	1.02

Note: Measured on a 1-5 scale.

Table A.3.6. Factor analysis results, reliability, and descriptive statistics for the scale measuring Organizational justice

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Oj01	I feel that my employer treats me fairly	.86	.87	.89	.85	.89	.80	.85	.86
Oj02	My employers judgements are usually fair	.77	.78	.75	.83	.73	.81	.84	.82
Oj03	I find that my employer behaves fairly towards me	.91	.95	.90	.93	.86	.95	.96	.93
Eigenvalue		2.15	2.26	2.16	2.26	2.5	2.21	2.35	2.29
Variance explained		71.62	75.26	71.85	75.40	68.39	73.84	78.26	76.29
α		.88	.90	.88	.90	.86	.89	.91	.90
N		314	505	406	439	197	479	324	356
M		3.24	3.39	3.32	3.24	3.27	3.39	3.39	3.31
SD		0.85	0.95	0.98	1.04	0.83	0.87	1.04	0.98

Note: Measured on a 1-5 scale.

Block 4: Absence and safety behavior

Table A.4.1. Descriptive statistics for number of times on sick-leave

		Time 1				Time 2			
Fr01a	How many **times** have you been absent from work because of illness during *the past three months*?	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)
	0	241 (79.0)	303 (63.5)	235 (64.9)	69.5	160 (81.3)	304 (65.2)	209 (69.4)	220 (67.5)
	1	52 (17.0)	128 (26.8)	94 (26.0)	20.8	29 (15.1)	128 (27.5)	69 (22.9)	95 (29.1)
	2	11 (3.6)	32 (6.7)	25 (6.9)	8.5	7 (3.6)	21 (4.5)	16 (5.3)	10 (3.1)
	3	1 (0.3)	9 (1.9)	6 (1.7)	0.8	-	7 (1.5)	5 (1.7)	
	4	-	1 (0.2)	1 (0.3)	-	-	3 (0.6)		
	5	-	2 (0.4)	-	-	-		2 (0.7)	
	6	-	1 (0.2)	-	-	-	1 (0.2)		
	10	-	-	-	1 (0.3)	-	2 (0.4)		1 (0.3)
	20	-	-	1 (0.3)	-	-			
	50	-	-	-	1 (0.3)	-			
	90	-	1 (0.2)	-	-	-			
	Mean (SD)	0.3 (.5)	0.7 (4.2)	0.5 (1.3)	0.6 (2.6)	0.2 (0.5)	0.5 (0.9)	0.4 (0.8)	0.4 (0.8)
	Missing	12	114	66	70	8	16	25	33

Table A.4.2. Descriptive statistics for number of days on sick-leave

		Time 1				Time 2			
Fr01b	How many **days** have you been absent from work because of illness during the *past three months*?	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)
	0	124 (66.7)	128 (42.8)	119 (47.8)	158 (56.2)	91 (68.4)	138 (46.0)	72 (44.2)	116 (51.6)
	1	11 (5.9)	45 (15.1)	20 (8.0)	24 (8.5)	4 (3.0)	40 (13.3)	12 (7.4)	21 (9.3)
	2	17 (9.1)	46 (15.4)	24 (9.6)	24 (8.5)	10 (7.5)	49 (16.3)	14 (8.6)	26 (11.6)
	3	10 (5.4)	31 (10.4)	22 (8.8)	9 (3.2)	10 (7.5)	27 (9.0)	10 (6.1)	20 (8.9)
	4	7 (3.8)	16 (5.4)	7 (2.8)	13 (4.6)	5 (3.8)	16 (5.3)	12 (7.4)	4 (1.8)
	5	10 (5.4)	10 (3.3)	18 (7.2)	10 (3.6)	11 (8.3	7 (2.3)	13 (8.0)	7 (3.1)
	6	1 (0.5)	3 (1.0)	6 (2.4)	7 (2.5)		6 (2.0)	2 (1.2)	1 (0.4)
	7	-	6 (2.0)	6 (2.4)	2 (0.7)	1 (0.8)	3 (1.0)	3 (1.8)	3 (1.3)
	8	3 (1.6)	2 (0.7)	3 (1.2)	5 (1.8)		2 (0.7)	1 (0.6)	
	9	-	4 (1.3)	4 (1.6)	1 (0.4)			3 (1.8)	1 (0.4)
	10	1 (0.5)	2 (0.7)	3 (1.2)	4 (1.4)		1 (0.3)	1 (0.6)	2 (0.9)
	11	-	-	-	1 (0.4)				1 (0.4)
	12	-	-	1 (0.4)	1 (0.4)		2 (0.7)		1 (0.4)
	13							1 (0.6)	
	14	-	2 (0.7)	1 (0.4)	3 (1.1)		1 (0.3)	1 (0.6)	4 (1.8)
	15	-	-	1 (0.4)	-		1 (0.3)	1 (0.6)	1 (0.4)
	16						1 (0.3)	1 (0.6)	
	18						1 (0.3)		
	19	-	1 (0.3)	-	2 (0.7)				
	20	-	1 (0.3)	-	2 (0.7)				1 (0.4)
	21								2 (0.9)
	22	-	1 (0.3)	-	-				
	23							1 (0.6)	

Table A.4.2 cont'd

		Time 1				Time 2			
Fr01b	How many **days** have you been absent from work because of illness during the *past three months*?	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)
	25					-	1 (0.3)	-	1 (0.4)
	27	-	-	-	1 (0.4)	-	-	-	1 (0.4)
	28	-	1 (0.3)	-	-	-	-	-	-
	29					-	-	1 (0.6)	-
	30	1 (0.5)	-	-	-	-	1 (0.3)	2 (1.2)	2 (0.9)
	33	-	-	1 (0.4)	-	-			
	35	-	-	1 (0.4)	-	-			3 (1.3)
	40	-	-	-	2 (0.7)	-	1 (0.3)	1 (0.6)	
	45	-	-	-	1 (0.4)	-		3 (1.8)	1 (0.4)
	50	-	-	1 (0.4)	1 (0.4)	-			
	60	-	-	2 (0.8)	1 (0.4)	-	1 (0.3)	2 (1.2)	
	65					-		1 (0.6)	
	66	-	-	-	1 (0.4)	-			
	90	1 (0.5)	-	6 (2.4)	7 (2.5)	-	1 (0.3)	5 (3.1)	6 (2.7)
	92	-	-	3 (1.2)	1 (0.4)	1 (0.8)			
	Mean (SD)	1.7 (7.1)	1.9 (3.3)	6.1 (17.9)	5.5 (16.6)	1.7 (8.1)	2.4 (7.3)	7.6 (18.5)	5.3 (15.6)
	Missing	131	292	179	179	100	182	163	134

Table A.4.3. Descriptive statistics for number of times working while ill

		Time 1				Time 2			
Fr03a	How many **times** have you been at work, when you should been home, because of illness during the *past three months*?	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)
	0	214 (70.9)	313 (68.5)	208 (62.3)	221 59.2)	156 (70.3)	328 (73.2)	200 (70.7)	182 (58.7)
	1	50 (16.6)	85 (18.6)	56 (16.8)	56 (15.0)	42 (18.9)	68 (15.2)	36 (12.7)	66 (21.3)
	2	25 (8.3)	39 (8.5)	40 (12.0)	43 (11.5)	15 (6.8)	27 (6.0)	22 (7.8)	34 (11.0)
	3	6 (2.0)	12 (2.6)	15 (4.5)	29 (7.8)	4 (1.8)	13 (2.9)	12 (4.2)	16 (5.2)
	4	2 (0.7)	2 (0.4)	5 (1.5)	4 (1.1)		5 (1.1)	1 (0.4)	3 (1.0)
	5	2 (0.7)	2 (0.4)	4 (1.2)	12(3.2)	4 (1.8)	3 (0.7)	9 (3.2)	6 (1.9)
	6	1 (0.3)	1 (0.2)	4 (1.2)	1 (0.3)		2 (0.4)	1 (0.4)	
	7	-	-	-	2 (0.5)				1 (0.3)
	10	2 (0.7)	3 (0.7)	1 (0.3)	3 (0.8)	1 (0.5)	1 (0.2)	2 (0.7)	1 (0.3)
	14	-	-	-	1 (0.3)				
	15	-	-	1 (0.3)	-				
	20	-	-	-	1 (0.3)				
	40						1 (0.2)		
	60								1 (0.3)
	70							1 (0.4)	
	Mean (SD)	0.5 (1.2)	0.6 (1.2)	0.8 (1.5)	1.0 (1.9)	0.5 (1.1)	0.6 (2.2)	0.7 (1.4)	0.9 (3.6)
	Missing	15	134	94	87	11	34	43	49

Table A.4.4. Descriptive statistics for number of days working while ill

Fr03b	How many **days** have you been at work, when you should been home, because of illness during the *past three months*?	Time 1				Time 2			
		Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)
	0	117 (60.3)	150 (51.7)	116 (28.4)	124 (44.8)	75 (57.3)	158 (57.5)	87 (54.4)	101 (44.9)
	1	13 (6.7)	34 (11.7)	14 (3.4)	12 (4.3)	16 (12.2)	37 (13.5)	7 (4.4)	16 (7.1)
	2	27 (13.9)	44 (15.2)	29 (7.1)	43 (15.5)	12 (9.2)	32 (11.6)	19 (11.9)	28 (12.4)
	3	10 (5.2)	22 7.6)	19 (4.7)	16 (5.8)	12 (9.2)	14 (5.1)	17 (10.6)	17 (7.6)
	4	10 (5.2)	15 (5.2)	16 (3.9)	17 (6.1)	5 (3.8)	9 (3.3)	8 (5.0)	11 (4.9)
	5	7 (3.6)	6 (2.1)	17 (4.2)	22 (7.9)	5 (3.8)	8 (2.9)	6 (3.8)	21 (9.3)
	6	5 (2.6)	6 (2.1)	7 (1.7)	6 (2.2)	2 (1.5)	4 (1.5)	4 (2.5)	4 (1.8)
	7	-	2 (0.7)	2 (0.5)	6 (2.2)	-	2 (0.7)	1 (0.6)	3 (1.3)
	8	-	3 (1.0)	1 (0.2)	1 (0.4)	-	1 (0.4)		1 (0.4)
	9	-	-	2 (0.5)	-	-	1 (0.4)		1 (0.4)
	10	3 (1.5)	7 (2.4)	9 (2.2)	13 (4.7)	3 (2.3)	4 (1.5)	5 (3.1)	13 (5.8)
	11	-	-	-	1 (0.4)	-		1 (0.6)	
	12	-	-	2 (0.5)	2 (0.7)	-	1 (0.4)	1 (0.6)	2 (0.9)
	14	-	-	1 (0.2)	4 (1.4)	-		2 (1.3)	1 (0.4)
	15	2 (1.0)	1 (0.3)	4 (1.0)	6 (2.2)	1 (0.8)	3 (1.1)		2 (0.9)
	18								1 (0.4)
	20	-	-	-	1 (0.4)	-			
	25	-	-	-	1 (0.4)	-		1 (0.6)	
	30	-	-	-	1 (0.4)	-		1 (0.6)	2 (0.9)
	40	-	-	-	1 (0.4)	-	1 (0.4)		
	60								1 (0.4)
	Mean (SD)	1.4 (2.4)	1.5 (2.3)	2.3 (3.3)	3.0 (4.9)	1.4 (2.4)	1.5 (3.4)	2.2 (4.1)	3.0 (5.7)
	Missing	123	301	189	183	102	207	166	134

Table A.4.5. Descriptive statistics for workplace safety regulation compliance

		Time 1				Time 2			
Wa01	How often do you ignore safety regulations at your workplace?	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)
	0	290 (95.4)	482 (99.6)	331 (89.9)	373 (91.2)	216 (97.7)	459 (99.6)	273 (91.3)	297 (89.7)
	1	7 (2.3)	2 (0.4)	21 (5.7)	28 (6.8)	3 (1.4)	2 (0.4)	9 (3.0)	27 (8.2)
	2	-	-	4 (1.1)	6 (1.5)	1 (0.5)		6 (2.0)	3 (0..9)
	3	3 (1.0)	-	2 (0.5)	-			2 (0.7)	3 (0..9)
	4	1 (0.3)	-	2 (0.5)	-			4 (1.3)	1 (0..3)
	5	-	-	2 (0.5)	1 (0.2)			4 (1.3)	
	6	2 (0.7)	-	-	-				
	7								
	10	-	-	2 (0.5)	-	1 (0.5)			
	11								
	12	1 (0.3)	-	-	-				
	14	-	-	1 (0.3)	-				
	20	-	-	-	1 (0.2)				
	25								
	30								
	36	-	-	1 (0.3)	-				
	40	-	-	1 (0.3)	-				
	50	-	-	1 (0.3)	-				
	Mean (SD)	0.1 (0.9)	0.0 (0.1)	0.6 (3.9)	0.2 (1.0)	0.7 (0.7)	0.0 (0.1)	0.4 (4.1)	0.1 (0.5)
	Missing	13	107	60	51	12	21	28	28

Table A.4.6. Descriptive statistics for number of reported work accidents

		Time 1				Time 2			
Wa02	How many work related accidents have you reported in the past 12 months?	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)
	0	290 (96.3)	480 (99.6)	346 (96.9)	369 (92.3)	215 (97.7)	458 (99.1)	282 (95.6)	308 (93.6)
	1	3 (1.0)	2 (.4)	5 (1.4)	13 (3.3)	2 (0.9)	3 (0.6)	8 (2.7)	12 (3.6)
	2	2 (0.7)	-	2 (.6)	11 (2.8)			2 (0.7)	6 (1.8)
	3	-	-	1 (0.3)	5 (1.3)	1 (0.4)	1 (0.2)		2 (0.6)
	4							1 (0.3)	1 (0.3)
	5	4 (1.3)	-	1 (0.3)	1 (0.3)				
	6	1 ()0.3	-	1 (0.3)	-				
	8	-	-	1 (0.3)	-				
	10	1 (0.3)	-	-	1 (0.3)	10 (0.4)		2 (0.7)	
	11					1 (0.4)			
	Mean (SD)	0.1 (0.9)	0.0 (0.1)	0.1 (0.6)	0.2 (0.7)	0.1 (1.0)	0.0 (0.2)	0.1 (0.9)	0.1 (0.5)
	Missing	16	109	71	60	13	20	31	30

Table A.4.7. Descriptive statistics for number of unreported accidents

Wa03	How many work related accident, *that have not been reported* have you experienced in the past 12 months	Time 1				Time 2			
		Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)
	0	260 (87.2)	476 (99.4)	310 (87.6)	311 (78.9)	187 (87.8)	450 (98.5)	256 (86.5)	260
	1	16 (5.4)	1 (0.2)	16 (4.5)	26 (6.6)	7 (3.3)	5 (1.1)	13 (4.4)	28 (8.6)
	2	9 (3.0)	2 (0.4)	13 (3.7)	20 (5.1)	9 (4.2)	1 (0.2)	11 (3.7)	18 (5.6)
	3	2 (0.7)	-	7 (2.0)	11 (2.8)	3 (1.4)	1 (0.2)	4 (1.4)	4 (1..2)
	4	2 (0.7)	-	3 (0.8)	6 (1.5)			4 (1.4)	2 (0.6)
	5	3 (1.0)	-	2 (.6)	9 (2.3)	4 (1.9)		2 (0.7)	4 (1.2)
	6	1 (0.3)	-	-	-	1 (0.5)			2 (0.6)
	7							1 (0.3)	
	10	2 (0.7)	-	3 (0.8)	6 (1.5)			3 (1.0)	4 (1.2)
	11					1 (0.5)			
	15	1 (0.3)	-	-	1 (.3)				1 (0.3)
	17	1 (0.3)	-	-	-				
	20	-	-	-	2 (.5)	1 (0.5)		1 (0.3)	1 (0.3)
	25	-	-	-	1 (.3)				
	30	1 (0.3)	-	-	-				
	40	-	-	-	1 (.3)				
	50							1 (0.3)	
	Mean SD	0.5 (2.4)	0.1 (0.1)	0.3 (1.2)	0.9 (3.2)	0.4 (1.8)	0.0 (1.9)	0.6 (3.4)	0.6 (1.9)
	Missing	19	112	74	66	20	25	30	35

Table A.4.8. Descriptive statistics for number of pPotential safety hazards

		Time 1				Time 2			
Wa04	How many situations *which could have resulted* in accidents in your work have you experienced in the past 12 months	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)
	1 Never	184 (58.6)	313 (62.6)	212 (53.3)	257 (58.7)	131 (57.5)	296 (62.1)	181 (55.5)	204 (57.5)
	2	75 (23.9)	127 (25.4)	100 (25.1)	106 (24.2)	51 (22.4)	111 (23.3)	68 (21.2)	82 (23.1)
	3	33 (10.5)	42 (8.4)	61 15.3 ()	48 (11.0)	29 (12.7)	49 (10.3)	48 (15.0)	41 (11.5)
	4	14 (4.5)	12 (2.4)	19 (4.8)	16 (3.7)	12 (5.3)	14 (2.9)	18 (5.6)	20 (5.6)
	5 Always	8 (2.5)	6 (1.2)	6 (1.5)	11 2.5 ()	5 (2.2)	7 (1.5)	6 (1.9)	8 (2.2)
	Mean (SD)	1.67(1.0)	1.5 (0.8)	1.8 (0.9)	1.7 (0.9)	1.7 (1.0)	1.6 (0.9)	1.7 (1.0)	1.7 (1.0)
	Missing	3	91	30	22	5	5	5	4

Block 5: Work-related attitudes and behaviors

Table A.5.1. Factor analysis results, reliability, and descriptive statistics for the scale measuring Attitudes toward individualized pay

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Ar01	I think individualized salary is good for the business	.81	.85	.83	.85	.93	.91	.82	.87
Ar02	It is good to link salary to results	.71	.64	.68	.70	.68	.64	.74	.74
Ar03	Salary linked to performance gives more possibility to affect the individual salary	.75	.78	.74	.77	.70	.73	.78	.78
Ar04	Individualized pay gives better possibilities for increased salary	.72	.71	.73	.76	.84	.74	.79	.87
Ar05	I think everyone who has similar work assignments should have the same pay (R)	.33	.20	.27	.29	.39	.16	.32	.27
Ar06	Those who perform well should also be well paid	.52	.48	.52	.55	.47	.50	.45	.41
Eigenvalue		2.61	2.52	2.56	2.75	2.90	2.60	2.77	2.89
Variance explained		43.44	41.91	42.73	45.81	48.33	43.35	46.16	48.21
α		.80	.77	.79	.81	.82	.77	.81	.81
N		312	501	398	436	199	479	317	352
M		3.77	3.81	3.47	3.28	3.78	3.85	3.56	3.23
SD		0.67	0.64	0.75	0.83	0.70	0.60	0.78	0.82

Note: Measured on a 1-5 scale. A one-factor solution had to be specified in Samples 2 and 3 at Time 1. At Time 2 a one factor solution had to be specified for sample 3.

Table A.5.2. Factor analysis results, reliability, and descriptive statistics for the scale measuring Pay satisfaction

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Ps01	I am very happy with the amount of money I make	.94	.94	.96	.93	.5	.97	.94	.94
Ps02	I am satisfied with the amount of pay I get	.89	.94	.92	.92	.94	.93	.94	.93
Ps03	Considering my skills and the effort I put into my work, I am very satisfied with my pay	.90	.94	.89	.88	.88	.91	.91	.86
Ps04	Overall I am satisfied with the amount of money my work generates	.92	.95	.92	.91	.92	.93	.94	.92
Ps05	I am content with my last salary increase	.75	.78	.74	.76	.76	.76	.77	.77
Eigenvalue		3.89	4.15	3.96	3.89	3.98	4.08	4.09	3.92
Variance explained		77.81	83.01	79.22	77.79	79.53	81.61	81.79	78.32
α		.94	.96	.95	.94	.95	.95	.96	.95
N		313	505	397	440	200	479	317	354
M		2.50	2.64	2.50	2.49	2.57	2.75	2.61	2.42
SD		1.10	1.21	1.16	1.12	1.02	1.16	1.18	1.08

Note: Measured on a 1-5 scale.

Table A.5.3. Factor analysis results, reliability, and descriptive statistics for the scale measuring Job satisfaction

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Js01	I enjoy being at my job	.88	.81	.87	.87	.86	.83	.88	.84
Js02	I am contented with the job I have	.90	.90	.91	.84	.86	.87	.87	.87
Js03	I am satisfied with my job	.85	.83	.80	.86	.91	.91	.91	.83
Eigenvalue		2.30	2.15	2.23	2.21	2.32	2.26	2.36	2.16
Variance explained		76.53	71.82	74.26	73.77	77.16	75.31	78.70	71.86
α		.91	.88	.90	.89	.91	.90	.92	.88
N		316	507	405	440	200	480	321	356
M		3.75	3.73	3.93	3.87	3.74	3.85	3.96	3.88
SD		0.94	0.89	0.93	0.88	0.88	0.86	0.96	0.85

Note: Measured on a 1-5 scale.

Table A.5.4. Factor analysis results, reliability, and descriptive statistics for the scale measuring Organizational commitment

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Oc02	I enjoy discussing my organization with people outside it	.69	.69	.45	.52	.63	.72	.50	.57
Oc05	I have a strong sense of affinity to the organization I work for	.84	.87	.82	.89	.77	.87	.78	.98
Oc06	It often feels as the organizations problems are the same as my own problems	.13	.22	.09	-.07	.15	.14	.03	.01
Oc07	The organization has a big personal importance to me	.57	.67	.47	.44	.71	.72	.53	.55
Eigenvalue		1.51	1.73	1.11	1.25	1.53	1.80	2.24	1.58
Variance explained		37.73	43.12	27.63	31.31	38.22	45.09	28.60	39.47
α		.63	.69	.49	.43	.63	.68	.48	.56
N		314	505	399	438	199	479	317	351
M		3.07	3.01	2.90	2.93	3.05	3.09	3.0	2.92
SD		0.73	0.77	0.67	0.68	0.72	0.77	0.63	0.73

Note: Measured on a 1-5 scale. A one-factor solution had to be specified in Samples 1, 3, and 4 at Time 1 and at Time 2.

Table A.5.5. Factor analysis results, reliability, and descriptive statistics for the scale measuring Perceived performance

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Pp01	I manage most of the situations that arise in my work	.54	.71	.70	.55	.53	.72	.58	.58
Pp02	I feel secure and competent in my occupational role	.58	.63	.69	.60	.52	.72	.64	.59
Pp03	I take own initiative to solve problems in my job	.54	.46	.56	.39	.51	.60	.44	.39
Pp04	I always try to be professional in my work	.60	.53	.33	.57	.75	.40	.76	.76
Pp05	I always do my best at work	.54	.43	.38	.57	.65	.43	.62	.64
Eigenvalue		1.55	1.56	1.55	1.47	1.79	1.75	1.90	1.82
Variance explained		31.08	31.23	31.00	29.31	35.78	34.98	38.10	36.47
α		.69	.68	.67	.67	.73	.71	.74	.73
N		315	505	403	440	199	478	321	356
M		4.28	4.30	4.37	4.43	4.27	4.27	4.42	4.42
SD		0.44	0.45	0.46	0.41	0.44	0.47	0.45	0.43

Note: Measured on a 1-5 scale. A one factor solution had to be specified in Samples 2 and 3 at Time 1. At Time 2 a one factor solution had to be specified in Sample 2.

Table A.5.6. Factor analysis results, reliability, and descriptive statistics for the scale measuring Responsibility for work outcomes

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Rw01	I feel a very high degree of personal responsibility for the work I do on this job	.46	.36	.32	.37	.38	.55	.39	.33
Rw02	I feel I should personally take the credit or blame for the results of my work on this job	.60	.68	.61	.70	.70	.71	.71	.74
Rw03	Whether or not this job gets done right is clearly my responsibility	.71	.74	.83	.72	.73	.61	.75	.64
Eigenvalue		1.07	1.14	1.16	1.14	1.17	1.81	1.21	1.07
Variance explained		35.69	38.03	38.53	38.07	39.02	39.37	40.51	35.80
α		.61	.61	.59	.61	.62	.65	.63	.58
N		315	506	404	441	199	479	321	356
M		3.96	4.17	4.06	4.04	4.02	4.17	4.09	4.00
SD		0.67	0.60	0.65	0.67	0.61	0.61	0.67	0.64

Note: Measured on a 1-5 scale.

Table A.5.7. Factor analysis results, reliability, and descriptive statistics for the scale measuring Turnover intention

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
It01	I feel that I could leave this job	.88	.93	.86	.89	.93	.92	.86	.83
It02	I am actively looking for other jobs	.67	.69	.71	.66	.68	.77	.70	.63
It03	If I was completely free to choose I would leave this job	.83	.83	.73	.66	.74	.82	.87	.69
Eigenvalue		1.91	2.03	1.78	1.65	1.86	2.11	1.97	1.58
Variance explained		63.50	67.55	59.16	55.02	62.08	70.46	65.70	52.55
α		.83	.85	.81	.77	.82	.87	.85	.76
N		316	506	405	439	199	478	321	356
M		2.10	1.90	1.99	1.96	2.08	1.81	1.86	1.90
SD		1.09	1.02	1.06	1.00	1.05	1.01	1.04	0.93

Note: Measured on a 1-5 scale.

Table A.5.8. Factor analysis results, reliability, and descriptive statistics for the scale measuring Employability (External)

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Ae01	I am aware of other employments where I could make use of what I have learnt in my current job	.60	.61	.56	.50	.66	.64	.56	.48
Ae02	I could get a similar (or better) job without having to relocate	.51	.67	.54	.51	.55	.60	.63	.53
Ae03	The work qualifications I bestow are in demand by employers	.65	.65	.64	.45	.68	.63	.57	.44
Ae04	With my work qualifications I can find new work relatively quickly	.94	.91	.92	.93	.88	.93	.94	.89
Ae05	With my experience I can find new work relatively quickly	.90	.93	.91	.93	.91	.93	.90	.95
Eigenvalue		2.73	2.94	2.68	2.45	2.08	2.88	2.73	2.39
Variance explained		54.66	58.75	53.64	48.93	56.17	57.62	54.65	47.83
α		.84	.87	.84	.79	.85	.86	.84	.84
N		312	503	399	436	199	479	317	352
M		3.26	3.75	3.23	3.19	3.24	3.74	3.24	3.26
SD		0.83	0.89	0.90	0.87	0.82	0.86	0.89	0.84

Note: Measured on a 1-5 scale.

Table A.5.9. Factor analysis results, reliability, and descriptive statistics for the scale measuring Employability (internal)

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Ai01	My competence allows me to work in several positions within the organization	.72	.76	.59	.63	.72	.76	.72	.62
Ai02	I could easily get a similar (or better) job within this organization	.76	.76	.64	.73	.73	.70	.70	.68
Ai03	The work qualification I bestow makes it easy for me to get another job within the organization	.88	.87	.87	.84	.85	.87	.90	.83
Ai04	My competence is so important that even if my current post disappears, I could easily get a new post within the organization	.71	.73	.74	.73	.74	.79	.79	.70
Ai05	My knowledge and experience can be used in many positions within the organization	.78	.85	.65	.64	.82	.85	.72	.68
Eigenvalue		2.98	3.16	2.48	2.59	2.99	3.16	2.96	2.48
Variance explained		59.53	63.17	49.61	51.71	59.70	63.16	59.26	49.51
α		.88	.89	.82	.84	.88	.89	.88	.83
N		313	504	404	436	198	474	321	356
M		3.16	2.79	3.25	3.19	3.13	2.81	3.28	3.21
SD		0.78	0.97	0.79	0.86	0.78	0.92	0.84	0.83

Note: Measured on a 1-5 scale.

Table A.5.10. Factor analysis results, reliability, and descriptive statistics for the scale measuring Work-life interference

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Wli01	The demands in my work interfere with my home and family life	.81	.79	.84	.78	.82	.77	.80	.83
Wli02	The amount of time my job takes up makes it difficult to fulfill family responsibilities	.73	.81	.80	.74	.73	.84	.84	.80
Wli03	Things I want to do at home do not get done because of the demands my job puts on me	.84	.79	.79	.67	.79	.79	.80	.81
Wli04	Due to work-related duties, I have to make changes to my plans for family activities	.78	.82	.69	.76	.78	.78	.77	.78
Eigenvalue		2.49	2.57	2.45	2.18	2.44	2.54	2.59	2.59
Variance explained		62.12	64.25	61.19	54.41	60.99	63.63	64.74	64.77
α		.87	.88	.86	.83	.86	.87	.88	.88
N		315	506	404	440	199	477	321	355
M		2.46	2.61	2.28	2.66	2.34	2.48	2.30	2.69
SD		0.99	1.03	1.03	1.01	0.93	0.98	1.06	1.10

Note: Measured on a 1-5 scale.

Table A.5.11. Factor analysis results, reliability, and descriptive statistics for the scale measuring Life-work interference

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Lwi01	Demands of my souse/partner interfere with work-related activities	.60	.76	.58	.68	.81	.77	.78	.71
Lwi02	I have to put off doing things at work because of demands on my time at home	.58	.59	.58	.53	.63	.58	.60	.59
Lwi03	Things I want to do at work don't get done because of the demands of my family or spouse/partner	.78	.80	.70	.68	.82	.77	.73	.75
Lwi04	Family-related strain interferes with my ability to perform job-related duties	.67	.71	.66	.66	.72	.67	.52	.66
Eigenvalue		1.75	2.08	1.60	1.65	2.23	1.98	1.78	1.84
Variance explained		43.67	51.90	39.93	41.25	55.81	49.58	44.41	46.08
α		.75	.81	.72	.73	.83	.79	.75	.77
N		315	505	402	441	200	479	319	356
M		1.62	1.56	1.35	1.47	1.58	1.57	1.24	1.46
SD		0.66	0.69	0.51	0.60	0.68	0.64	0.50	0.23

Note: Measured on a 1-5 scale.

Table A.5.12. Factor analysis results, reliability, and descriptive statistics for the scale measuring Over-commitment

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Ovc01	It often occurs that I wake up in the morning and think about work related problems	.74	.80	.77	.75	.74	.79	.81	.75
Ovc02	When I come home, it is easy for me to switch off from work (R)	.62	.72	.68	.65	.73	.70	.64	.72
Ovc03	Those who are close to me say I give too much of myself to my work	.51	.58	.63	.56	.49	.55	.63	.56
Ovc04	I can rarely let go of thoughts concerning my work	.80	.87	.87	.85	.81	.86	.88	.84
Ovc05	Even in the evenings when I am free I think about work	.90	.92	.90	.90	.94	.92	.93	.89
Ovc06	My work is on my mind even on the week-ends	.86	.85	.84	.81	.86	.85	.85	.82
Eigenvalue		3.40	3.80	3.71	3.49	3.59	3.75	3.84	3.59
Variance explained		56.58	63.37	61.85	58.13	59.84	62.49	64.00	59.88
α		.88	.91	.90	.89	.89	.90	.91	.89
N		315	506	405	440	199	477	321	355
M		2.99	3.12	3.04	3.62	3.00	3.08	3.00	3.58
SD		0.99	1.07	1.07	0.99	0.99	1.03	1.11	1.03

Note: Measured on a 1-5 scale.

Block 6.1: Coping strategies

Table A.6.1.1. Factor analysis results, reliability, and descriptive statistics for the scale measuring Coping – Change the situation

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Ccs01	I try to change the situation to get what I want	.83	.78	.81	.90	.88	.89	.83	.85
Ccs02	I focus my efforts on changing the situation	.63	.61	.65	.62	.62	.63	.53	.50
Ccs03	I work on changing the situation to get what I want	.89	.92	.84	.85	.91	.83	.91	.93
Eigenvalue		1.88	1.83	1.79	1.93	1.97	1.88	1.80	1.84
Variance explained		62.59	60.88	59.64	64.16	65.58	62.61	60.07	61.37
α		.82	.81	.81	.83	.84	.82	.79	.79
N		158	252	193	441	103	227	160	357
M		3.70	3.80	3.77	3.91	3.78	3.63	3.84	3.86
SD		0.67	0.68	0.76	0.68	0.71	0.84	0.71	0.65

Note: Measured on a 1-5 scale.

Table A.6.1.2. Factor analysis results, reliability, and descriptive statistics for the scale measuring Coping – Accommodation

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Ccs04	I make an effort to change my expectations	.91	.73	.77	.82	.77	.90	.66	.73
Ccs05	I try to adjust my expectations to meet the situation	.20	.37	.43	.46	.49	.41	.44	.41
Ccs06	I try to adjust my own standards	.50	.83	.81	.68	.76	.75	.59	.72
Eigenvalue		1.11	1.35	1.44	1.35	1.41	1.54	0.97	1.21
Variance explained		37.08	45.01	47.93	44.83	47.09	51.25	32.35	40.48
α		.49	.66	.70	.68	.71	.71	.57	.64
N		157	252	193	439	103	224	160	354
M		3.07	3.00	3.17	3.15	2.99	2.89	3.13	3.14
SD		0.62	0.69	0.72	0.70	0.65	0.71	0.61	0.68

Note: Measured on a 1-5 scale. The measurement properties for this scale in Sample 1 at Time 1 are not satisfactory.

Table A.6.1.3. Factor analysis results, reliability, and descriptive statistics for the scale measuring Coping - Devaluation

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Ccs07	I tell myself the problem is unimportant	.62	.62	.67	.65	.54	.65	.41	.67
Ccs08	I tell myself the problem wasn't so serious after all	.57	.73	.78	.74	.80	.73	.58	.83
Ccs09	I tell myself the problem isn't such a big deal after all	.82	.84	.78	.85	.89	.88	.93	.87
Eigenvalue		1.37	1.63	1.67	1.70	1.72	1.74	1.37	1.89
Variance explained		45.71	54.30	55.76	56.64	57.37	58.02	45.81	62.97
α		.70	.77	.79	.79	.78	.80	.66	.83
N		159	252	193	440	103	226	160	355
M		2.91	2.93	2.87	2.66	2.87	2.79	2.91	2.66
SD		0.77	0.83	0.84	0.85	0.78	0.88	0.72	0.88

Note: Measured on a 1-5 scale.

Table A.6.1.4. Factor analysis results, reliability, and descriptive statistics for the scale measuring Coping – Avoidance

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Ccs10	I try to turn my attention away from the problem	.63	.64	.55	.69	.75	.54	.67	.63
Ccs11	I try to keep my mind off the problem	.81	.90	.99	.78	.87	.80	.80	.85
Ccs12	I try to avoid thinking about the problem	.72	.60	.47	.64	.68	.61	.58	.65
Eigenvalue		1.57	1.58	1.53	1.48	1.78	1.31	1.43	1.55
Variance explained		52.19	52.59	50.85	49.44	59.48	43.65	47.83	51.82
α		.76	.75	.68	.74	.81	.68	.72	.75
N		159	252	193	440	103	227	160	356
M		2.53	2.45	2.62	2.50	2.67	2.39	2.51	2.54
SD		0.84	0.85	0.87	0.87	0.80	0.82	0.79	0.86

Note: Measured on a 1-5 scale.

Table A.6.1.5. Factor analysis results, reliability, and descriptive statistics for the scale measuring Coping – Symptom reduction

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Ccs13	I just try to relax	.37	.55	.52	.35	.69	.41	.48	.58
Ccs14	I try to relieve my tension somehow	.91	.61	.44	.84	.72	.73	.60	.76
Ccs15	I try to just get it off my chest	.17	.36	.54	.29	.46	.25	.20	.33
Eigenvalue		1.00	0.80	0.76	0.91	1.20	0.76	0.63	1.03
Variance explained		33.33	26.66	25.30	30.48	40.05	25.45	21.16	34.30
α		.40	.50	.50	.45	.65	.42	.38	.56
N		159	252	193	440	103	225	160	355
M		3.21	3.21	3.34	3.27	3.13	3.05	3.25	3.25
SD		0.62	0.70	0.71	0.70	0.71	0.75	0.64	0.71

Note: Measured on a 1-5 scale. The measurement properties for this scale are not satisfactory. Use either as single items or do not include in analysis.

Block 6.2: Social support

Table A.6.2.1. Factor analysis results, reliability, and descriptive statistics for the scale measuring Social support – Co-workers

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Ssc01	I usually receive help from my co-worker when something needs to be done quickly	.75	.61	.75	.76	.58	.61	.73	.78
Ssc02	I always receive the help I need from my co-worker when difficulties in my work arise	.85	.97	.93	.91	.86	.91	.99	.90
Ssc03	When I encounter problems at work, there is always a co-worker to turn to	.83	.61	.77	.84	.86	.77	.75	.83
Eigenvalue		1.97	1.69	2.02	2.11	1.81	1.80	2.08	2.11
Variance explained		65.74	56.16	67.27	70.16	60.29	59.97	69.29	70.49
α		.85	.76	.86	.87	.80	.80	.86	.88
N		157	255	211	440	97	250	164	359
M		3.56	3.85	3.55	3.78	3.40	3.87	3.64	3.75
SD		0.93	0.77	0.99	0.96	0.91	0.76	1.01	0.91

Note: Measured on a 1-5 scale.

Table A.6.2.2. Factor analysis results, reliability, and descriptive statistics for the scale measuring Social support - Supervisor

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Sss01	When I encounter problems at work, I can always ask my manager for advice	.87	.85	.88	.89	.93	.90	.91	.91
Sss02	I always receive help from my manager when difficulties in my work arise	.93	.90	.90	.92	.94	.88	.90	.93
Sss03	My manager helps me when I encounter problems in my work that I can not solve by myself	.96	.96	.95	.97	.93	.95	.98	.96
Eigenvalue		2.54	2.45	2.50	2.59	2.62	2.48	2.58	2.62
Variance explained		84.74	81.60	83.20	86.30	87.29	82.69	85.92	87.33
α		.94	.93	.94	.95	.95	.93	.95	.95
N		157	255	211	441	97	249	164	358
M		3.14	3.49	3.36	3.19	3.17	3.52	3.57	3.20
SD		1.15	1.06	1.12	1.19	1.19	1.02	1.10	1.18

Note: Measured on a 1-5 scale.

Table A.6.2.3. Factor analysis results, reliability, and descriptive statistics for the scale measuring Social support - Family

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Ssf01	I have someone outside of work to whom I can talk about difficulties and problems in my work	.77	.84	.83	.87	.91	.90	.93	.87
Ssf02	When things are difficult and confusing at work I have someone outside of work who supports me	.82	.80	.77	.83	.90	.77	.67	.83
Ssf03	I have a network of people outside of work in which I can discuss work related problems	.53	.63	.73	.64	.56	.62	.63	.65
Ssf04	I can receive support from those who are close to me when it comes to problems at work	.79	.82	.75	.76	.80	.73	.63	.73
Eigenvalue		2.16	2.41	2.37	2.44	2.60	2.30	2.11	2.40
Variance explained		54.08	60.27	59.29	60.92	65.06	57.57	52.87	60.12
α		.82	.85	.85	.86	.87	.84	.80	.85
N		157	255	211	440	97	249	164	359
M		3.18	3.49	3.35	3.77	3.09	3.46	3.23	3.72
SD		1.05	1.06	1.07	0.99	1.13	1.00	0.99	0.99

Note: Measured on a 1-5 scale.

Block 7.1. Core self-evaluations

Table A.7.1.1. Factor analysis results, reliability, and descriptive statistics for the scale measuring Self-esteem

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Est01	I feel that I am a person of worth, at least on an equal basis with others.	.67	.60	.76	-	.69	.61	.81	-
Est02	I feel that I have a number of good qualities	.49	.64	.58	-	.60	.58	.55	-
Est03	All in all, I am inclined to feel that I am a failure (R)	.57	.58	.59	-	.62	.49	.59	-
Est04	I am able to do things as well as most other people	.53	.61	.56	-	.66	.56	.72	-
Est05	I feel that I have a lot to be proud of	.55	.54	.66	-	.68	.59	.63	-
Est06	I take a positive attitude towards myself	.78	.75	.64	-	.68	.71	.80	-
Est07	On the whole, I am satisfied with myself	.67	.71	.80	-	.74	.72	.75	-
Est08	I wish I could have more respect for my self (R)	.56	.52	.51	-	.50	.48	.54	-
Est09	I certainly feel useless at times (R)	.69	.52	.64	-	.49	.61	.66	-
Est10	At times I think I am no good at all (R)	.62	.62	.73	-	.52	.63	.70	-
Eigenvalue		3.82	3.75	4.25	-	3.89	3.63	4.63	-
Variance explained		38.22	37.48	42.51	-	38.86	36.28	46.26	-
α		.86	.85	.88	-	.86	.85	.89	-
N		158	252	191	-	102	228	159	-
M		4.08	4.00	4.04	-	4.08	3.99	4.14	-
SD		0.53	0.59	0.67	-	0.54	0.61	0.63	-

Note: Measured on a 1-5 scale. - No data collected A one-factor solution had to be specified in all samples

Table A.7.1.2. Factor analysis results, reliability, and descriptive statistics for the scale measuring Self efficacy

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Ef01	I am strong enough to overcome life's struggles	.72	.69	.65	-	.75	.74	.53	-
Ef02	At root, I am a weak person (R)	.63	.64	.64	-	.59	.66	.53	-
Ef03	I can handle the situations that life brings	.67	.60	.62	-	.64	.45	.73	-
Ef04	I usually feel that I am an unsuccessful person (R)	.65	.61	.73	-	.67	.60	.66	-
Ef05	I often feel that there is nothing that I can do well (R)	.49	.53	.61	-	.63	.71	.64	-
Ef06	I feel competent to deal effectively with the real world	.80	.67	.69	-	.71	.49	.66	-
Ef07	I often feel like a failure (R)	.62	.67	.74	-	.69	.70	.67	-
Ef08	I usually feel I can handle the typical problems that come up in life	.72	.71	.67	-	.67	.69	.70	-
Eigenvalue		3.57	3.28	3.61	-	3.60	3.26	3.32	-
Variance explained		44.62	41.03	45.10	-	44.95	40.80	41.48	-
α		.86	.85	.87	-	.87	.84	.85	-
N		159	252	192	-	102	228	160	-
M		4.25	4.24	4.24	-	4.24	4.22	4.31	-
SD		0.51	0.53	0.60	-	0.42	0.57	0.52	-

Note: Measured on a 1-5 scale. - No data collected. A one-factor solution had to be specified in all samples.

Table A.7.1.3. Factor analysis results, reliability, and descriptive statistics for the scale measuring Locus of control

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Lo01*	Whether or not I get to be a leader depends mostly on my ability				-	.44	.29	.43	-
Lo02	When I make plans, I am almost certain to make them work	.49	.46	.63	-	.55	.62	.62	-
Lo03	When I get what I want, it's usually because I'm lucky (R)	.47	.50	.35	-	.47	.44	.32	-
Lo04	I have often found that what is going to happen will happen (R)	.54	.52	.53	-	.50	.20	.54	-
Lo05	I can pretty much determine what will happen in my life	.70	.65	.56	-	.73	.67	.62	-
Lo06	I am usually able to protect my personal interests	.51	.53	.72	-	.36	.57	.62	-
Lo07	When I get what I want, it's usually because I worked hard for it	.39	.31	.33	-	.44	.48	.39	-
Lo08	My life Is determined by my own actions	.44	.49	.50	-	.65	.28	.54	-
Eigenvalue		1.86	1.77	1.98	-	2.23	1.79	2.18	-
Variance explained		26.88	25.31	28.24	-	27.88	22.39	27.21	-
α		.71	.69	.72	-	.74	.67	.74	-
N		157	249	190	-	102	228	160	-
M		3.80	3.84	3.83	-	3.84	3.82	3.90	-
SD		0.50	0.48	0.55	-	0.49	0.48	0.52	-

Note: Measured on a 1-5 scale. - No data collected. * Lo01 had to be removed from the scale used at Time 1 due to problems with the translation. This mistake was corrected at Time 2. A one-factor solution had to be specified in all samples

Table A.7.1.4. Factor analysis results, reliability, and descriptive statistics for the scale measuring Neuroticism

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Ne01	My feelings are easily hurt	.68	.56	.70	-	.66	.63	.61	-
Ne02	I'm a nervous person	.61	.61	.58	-	.60	.54	.59	-
Ne03	I'm a worrier	.79	.69	.77	-	.74	.60	.79	-
Ne04	I am often tense or "high strung"	.69	.66	.77	-	.68	.68	.72	-
Ne05	I often suffer from "nerves"	.52	.60	.46	-	.60	.49	.55	-
Ne06	I am often troubled by feelings of guilt	.71	.54	.67	-	.63	.68	.71	-
Ne07	My mood often goes up and down	.58	.57	.76	-	.70	.66	.67	-
Ne08	Sometimes I feel miserable for no reason	.69	.64	.64	-	.73	.58	.68	-
Ne09	I am an irritable person	.48	.48	.54	-	.47	.60	.61	-
Ne10	I often feel fed up	.68	.61	.67	-	.65	.58	.61	-
Ne11	I often worry too long after an embarrassing experience	.60	.47	.56	-	.50	.57	.57	-
Ne12	I often feel lonely	.34	.50	.43	-	.41	.52	.37	-
Eigenvalue		4.68	4.04	4.89	-	4.61	4.27	4.80	-
Variance explained		38.98	33.67	40.71	-	38.43	35.62	40.00	-
α		.88	.86	.89	-	.88	.87	.88	-
N		159	252	191	-	102	228	160	-
M		2.07	2.11	2.07	-	2.09	2.07	2.01	-
SD		0.64	0.64	0.72	-	0.65	0.67	0.69	-

Note: Measured on a 1-5 scale. - No data collected. A one-factor solution had to be specified in all samples

Block 7.2: HP5i

Table A.7.2.1. Factor analysis results, reliability, and descriptive statistics for the scale measuring Agreeableness

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Pag01	I do not hesitate to use sarcastic remarks	.88	.67	.80	.70	.90	.72	.87	.78
Pag02	If one gets treated badly I think one should retaliate	.45	.56	.61	.60	.53	.62	.47	.59
Pag03	I am good at coming up with poercing and malicious answers	.49	.41	.58	.51	.59	.42	.60	.57
Pag04	If someone offends me or persons close to me, they can count on trouble	.46	.65	.64	.56	.52	.63	.45	.51
Eigenvalue		1.42	1.36	1.75	1.43	1.71	1.48	1.56	1.54
Variance explained		35.61	33.90	43.79	35.64	42.80	36.92	38.89	38.50
α		.65	.66	.75	.68	.72	.68	.69	.70
N		157	255	211	439	97	250	164	357
M		2.77	2.40	2.22	2.27	2.68	2.41	2.10	2.21
SD		0.76	0.76	0.83	0.80	0.82	0.74	0.73	0.79

Note: Measured on a 1-5 scale.

Table A.7.2.2. Factor analysis results, reliability, and descriptive statistics for the scale measuring Conscientiousness

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Pco01	I have a tendency to act on the spur of the moment	.86	.77	.87	.80	.87	.88	.88	.84
Pco02	I often happens that I throw myself too hastily into things	.76	.70	.77	.79	.76	.70	.71	.77
Pco03	I usually talk before I think	.59	.60	.65	.68	.65	.51	.65	.75
Pco04	I am an impulsive person	.65	.64	.65	.71	.60	.64	.63	.66
Eigenvalue		2.09	1.85	2.21	2.23	2.11	1.95	2.11	2.30
Variance explained		52.22	46.26	55.13	55.65	52.78	48.80	52.73	57.52
α		.81	.77	.83	.83	.81	.78	.81	.84
N		157	255	211	439	97	250	164	357
M		2.38	2.30	2.51	2.67	2.49	2.37	2.44	2.61
SD		0.80	0.74	0.85	0.90	0.83	0.76	0.81	0.89

Note: Measured on a 1-5 scale.

Table A.7.2.3. Factor analysis results, reliability, and descriptive statistics for the scale measuring Extraversion

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Pex02	I enjoy life	.75	.62	.65	.69	.78	.65	.55	.67
Pex03	I am in a good mood when I socialize	.64	.52	.53	.59	.64	.52	.62	.55
Pex04	I am keen on trying out new things	.39	.38	.60	.45	.59	.43	.53	.45
Pex05	Life is filled with interesting things	.78	.85	.61	.68	.78	.87	.77	.75
Pex06	I try to engage in things that I feel will keep me involved	.16	.42	.39	.45	.37	.50	.50	.51
Eigenvalue		1.75	1.70	1.59	1.70	2.10	1.88	1.91	1.78
Variance explained		34.96	33.99	31.84	33.98	42.01	37.69	36.14	35.55
α		.66	.69	.69	.71	.76	.73	.73	.72
N		156	255	206	435	97	250	162	353
M		3.91	3.88	4.02	4.07	3.96	3.89	4.04	4.04
SD		0.53	0.55	0.55	0.56	0.58	0.55	0.56	0.56

Note: Measured on a 1-5 scale. The scale has been modified since published, and one of the new items, pex01, did not exhibit adequate measurement properties, and was removed from the scale for the Time 2 measurement.

Table A.7.2.4. Factor analysis results, reliability, and descriptive statistics for the scale measuring Neuroticism

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Pne01	I often feel uncomfortable and ill at ease	.65	.61	.63	.63	.61	.58	.60	.60
Pne02	I feel pressure when I am urged to speed up	.57	.59	.43	.58	.60	.53	.51	.51
Pne03	Often my muscles are so tense that I get tired	.80	.74	.64	.70	.75	.83	.74	.74
Pne04	Unexpected noise makes me jump	.25	.49	.56	.37	.51	.36	.54	.54
Eigenvalue		1.45	1.51	1.30	1.34	1.56	1.44	1.46	1.46
Variance explained		36.18	37.84	32.50	33.59	38.91	36.08	36.50	36.50
α		.64	.70	.65	.65	.71	.66	.69	.65
N		157	255	211	439	97	250	164	357
M		2.42	2.44	2.58	2.76	2.36	2.53	2.59	2.75
SD		0.76	0.83	0.82	0.87	0.78	0.80	0.86	0.85

Note: Measured on a 1-5 scale.

Table A.7.2.5. Factor analysis results, reliability, and descriptive statistics for the scale measuring Openness

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Pop01	I don't analyze my feelings	.47	.45	.32	.45	.41	.45	.47	.47
Pop02	I think emotions are exaggerated	.75	.86	.70	.77	.78	.80	.72	.72
Pop03	I don't understand other's feelings	.72	.68	.75	.62	.84	.66	.67	.76
Pop04	I avoid involving myself in other's problems	.47	.51	.42	.40	.55	.44	.28	.40
Eigenvalue		1.52	1.67	1.33	1.34	1.78	1.46	1.28	1.48
Variance explained		37.95	41.79	33.20	33.50	44.41	36.55	31.94	36.99
α		.69	.71	.61	.64	.73	.67	.60	.67
N		157	255	211	439	97	250	164	357
M		2.48	2.30	2.17	2.19	2.52	2.37	2.14	2.20
SD		0.71	0.71	0.68	0.70	0.73	0.66	0.67	0.69

Note: Measured on a 1-5 scale.

Block 8.1: Mental health complaints

Table A.8.1.1. Factor analysis results, reliability, and descriptive statistics for the scale measuring Health complaints

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Gh01	Been able to concentrate on whatever you're doing (R)	.68	.49	.43	-	.49	.55	.59	-
Gh02	Lost much sleep over worry	.69	.55	.51	-	.64	.52	.58	-
Gh03	Felt that you are playing a useful part in things (R)	.35	.33	.52	-	.30	.35	.25	-
Gh04	Felt capable of making decisions about things (R)	.54	.51	.57	-	.43	.45	.46	-
Gh05	Felt constantly under strain	.62	.51	.45	-	.51	.48	.47	-
Gh06	Felt you could overcome your difficulties (R)	.56	.61	.53	-	.57	.56	.51	-
Gh07	Been able to enjoy your normal day-to-day activities (R)	.62	.65	.60	-	.59	.56	.56	-
Gh08	Felt that you could not overcome difficulties?	.66	.65	.55	-	.61	.64	.49	-
Gh09	Been feeling unhappy and depressed	.70	.70	.68	-	.76	.66	.70	-
Gh10	Been losing confidence in yourself	.67	.60	.75	-	.59	.63	.68	-
Gh11	Been thinking of yourself as a worthless person	.61	.52	.60	-	.61	.53	.63	-
Gh12	Been feeling reasonable happy all things considered (R)	.57	.51	.54	-	.58	.54	.61	-
Eigenvalue		4.51	3.75	3.86	-	3.87	3.60	3.7	-
Variance explained		37.54	31.26	32.16	-	32.29	29.98	30.84	-
α		.87	.84	.85	-	.84	.83	.83	-
N		157	245	190	-	102	211	159	-
M		0.73	0.75	0.72	-	.73	0.69	0.66	-
SD		0.41	0.39	0.41	-	0.39	0.36	0.36	-

Note: Response scale: 0 (never) – 3 (always). - No data collected. A one-factor solution had to be specified in all samples

Block 8.2: Depressive symptoms

Table A.8.2.1. Factor analysis results, reliability, and descriptive statistics for the scale measuring Depression

	Have you during the past two weeks …	Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Mdi01	… felt low in spirits or sad?	.71	.74	.78	.74	.75	.70	.79	.79
Mdi02	… lost interest in your daily activities?	.68	.66	.79	.67	.67	.74	.74	.75
Mdi03	… felt yourself lacking in strength and energy?	.70	.75	.80	.77	.80	.78	.77	.78
Mdi04	…felt less self-confident?	.63	.70	.78	.76	.73	.70	.75	.75
Mdi05	… felt you had a bad conscience or feelings of guilt?	.61	.70	.75	.70	.63	.70	.75	.73
Mdi06	…felt that life wasn't worth living?	.51	.52	.55	.50	.51	.55	.71	.48
Mdi07	… had trouble focusing when for example reading the newspaper or watching television?	.64	.62	.67	.66	.54	.63	.63	.60
Mdi08	… had difficulty making decisions?	.64	.55	.65	.61	.56	.66	.71	.64
Mdi09	… felt restless and agitated?	.58	.63	.75	.69	.59	.57	.63	.69
Mdi10	… felt irritated and angry?	.60	.66	.63	.61	.61	.72	.62	.67
Mdi11	…felt sluggish and slow?	.77	.64	.73	.63	.68	.59	.73	.71
Mdi12	…had trouble sleeping at night?	.54	.53	.61	.61	.57	.46	.61	.57
Mdi13	…needed to sleep more than usual?	.65	.57	.63	.57	.62	.59	.70	.61

Table A.8.2.1. cont'd

	Have you during the past two weeks …	Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Mdi14	… had reduced appetite or involuntarily lost weight lately?	.36	.34	.32	.41	.28	.37	.50	.36
Mdi15	… had increased appetite or gained weight lately ?	.26	.32	.34	.35	.38	.37	.35	.39
Mdi16	… felt pressured to get things done?	.60	.50	.46	.56	.48	.53	.62	.64
Mdi17	… worried about minor matters?	.73	.71	.72	.69	.73	.74	.66	.73
Eigenvalue		6.38	6.28	7.43	6.74	6.34	6.64	7.57	7.25
Variance explained		37.51	36.92	43.73	39.63	37.29	39.07	45.10	42.64
α		.91	.90	.92	.91	.90	.91	.93	.92
N		156	253	212	440	96	252	159	157
M		1.60	1.55	1.65	1.66	1.52	1.56	1.65	1.67
SD		0.43	0.42	0.48	0.46	0.41	0.42	0.51	0.50

Note: Response scale: 1 (never) – 4 (always). A one-factor solution had to be specified in all samples

Table A.8.2.2. Salience of the symptoms reported above

		Time 1				Time 2			
		Sample 1 N (% Ja)	Sample 2 N (% Ja)	Sample 3 N (% Ja)	Sample 4 N (% Ja)	Sample 1 N (% Ja)	Sample 2 N (% Ja)	Sample 3 N (% Ja)	Sample 4 N (% Ja)
Mdi18	Have any of the above mentioned caused apparent suffering for you under the past two weeks	28 (18.9)	27 (10.8)	54 (26.6)	108 (25.8)	18 (16.8)	27 (10.9)	44 (27.8)	86 (24.7)

Block 9: Somatic health complaints

Table A.9.1. Factor analysis results, reliability, and descriptive statistics for the scale measuring Somatic health complaints

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Hb01	Stomach problems?	.44	.37	.47	.47	.40	.49	.48	.48
Hb02	Heart or chest problems?	.28	.28	.40	.34	.28	.35	.43	.45
Hb03	Joint problems	.56	.47	.53	.63	.57	.57	.50	.64
Hb04	Muscular problems?	.75	.68	.68	.75	.74	.72	.64	.80
Hb05	Neck/Shoulder pains?	.57	.70	.75	.76	.60	.74	.72	.74
Hb06	Back pain?	.49	.63	.61	.63	.54	.66	.65	.63
Hb07	Headaches?	.42	.46	.60	.52	.38	.44	.60	.54
Hb08	Skin irritations or itching?	.46	.29	.30	.26	.54	.21	.34	.34
Hb09	Breathing problems?	.26	.22	.49	.27	.37	.23	.43	.30
Hb10	Longterm colds ?	.30	.24	.32	.23	.19	.18	.41	.24
Eigenvalue		2.25	2.19	2.84	2.73	2.36	2.51	2.86	2.98
Variance explained		22.51	21.86	28.39	27.28	23.59	25.17	28.62	29.93
α		.72	.70	.78	.76	.73	.73	.79	.79
N		315	505	403	438	199	480	313	359
M		1.68	1.69	1.89	1.94	1.70	1.65	1.88	1.93
SD		0.54	0.53	0.67	0.67	0.57	0.54	0.67	0.69

Note: Measured on a 1-5 scale. A one-factor solution had to be specified in all samples

Block 10: Life outside work

Table A.10.1.1. Factor analysis results, reliability, and descriptive statistics for the scale measuring Sleeping problems

		Time 1				Time 2			
		Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Sk01	I have difficulties falling asleep	.71	.76	.68	.69	.72	.70	.64	.71
Sk03	I wake up on several occasions during the night and sometimes I have problems getting back to sleep	.80	.79	.75	.79	.78	.73	.86	.82
Sk04	I am tired due to sleep problems	.87	.88	.88	.94	.84	.84	.84	.86
Eigenvalue		1.89	1.97	1.80	1.98	1.82	1.74	1.86	1.92
Variance explained		63.08	65.65	59.92	66.12	60.59	58.18	62.08	63.98
α		.83	.85	.81	.85	.82	.80	.82	.84
N		316	506	404	442	197	479	320	357
M		2.17	2.17	2.41	2.59	2.15	2.16	2.41	2.52
SD		0.87	0.88	0.93	0.99	0.89	0.83	0.97	0.98

Note: Measured on a 1-5 scale.

Table A.10.1.2. Descriptive statistics for the item measuring Sleeping problems

		Time 1				Time 2			
Sk02	I have difficulties waking up	Sample1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)
	1 Never	83 (26.4)	145 (28.7)	127 (31.5)	149 (33.6)	79 (34.2)	139 (28.9)	108 (33.3)	133 (37.2)
	2	100 (31.8)	171 (33.9)	138 (34.2)	146 (33.0)	74 (32.0)	155 (32.2)	108 (33.3)	121 (34.1)
	3	73 (3.2)	104 (20.6)	76 (18.9)	80 (18.1)	47 (20.3)	104 (21.6)	58 (17.9)	52 (14.6)
	4	46 (4.6)	61 (12.1)	43 (10.7)	43 (9.7)	23 (10.0)	61 (12.7)	34 (10.5)	37 (10.4)
	5 Always	12 (3.8)	24 (4.8)	19 (4.7)	25 (5.6)	8 (3.4)	22 (4.6)	16 (4.9)	13 (3.7)
	N	314	505	403	443	231	481	324	355
	Mean (SD)	2.38 (1.1)	2.30 (1.2)	2.23 (1.1)	2.21 (1.2)	2.16 (1.1)	2.32 (1.1)	2.20 (1.2)	2.09 (1.1)

Table A.10.2Descriptive statistics for use of medication – gastro-intestinal

		Time 1				Time 2			
Lkm01	I use medication for acid indigestion, heart burn or gastric ulcers	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)
	1 Never	239 (75.6)	388 (77.0)	300 (74.3)	326 (75.3)	178 (77.1)	381 (79.7)	225 (69.2)	270 (75.6)
	2	36 (11.4)	62 (12.3)	40 (9.9)	46 (10.6)	20 (8.7)	48 (10.0)	42 (12.9)	38 (10.6)
	3	27 (8.5)	38 (7.5)	43 (10.6)	42 (9.7)	22 (9.5)	36 (7.5)	37 (11.4)	31 (8.7)
	4	12 (3.8)	7 (1.4)	15 (3.7)	14 (3.2)	7 (3.0)	6 (1.3)	13 (4.0)	12 (3.4)
	5 Always	2 (0.6)	9 (1.8)	6 (1.5)	5 (1.2)	4 (1.79	6 (1.3)	8 (2.5)	6 (1.7)
	N	316 (100)	504 (100)	404 (100)	433 (100)	231	478	325	357
	Mean (SD)	1.4 (0.9)	1.3 (0.8)	1.5 (0.9)	1.4 (0.9)	1.4 (0.9)	1.4 (0.8)	1.6 (1.0)	1.5 (0.9)

Table A.10.3. Descriptive statistics for use of medication – pain medication

Lkm02	I use medication for pain	Time 1				Time 2			
		Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)
	1 Never	156 (49.5)	302 (59.6)	170 (42.0)	211 (48.4)	125 (54.1)	296 (61.7)	141 (43.4)	164 (45.8)
	2	100 (31.7)	106 (20.9)	104 25.7	109 (25.0)	60 (26.0)	97 (20.2)	78 (24.0)	92 (25.7)
	3	44 (14.0)	74 (14.6)	83 (20.5)	75 (17.2)	33 (14.3)	63 (13.1)	67 (20.6)	68 (19.0)
	4	12 (3.8)	15 (3.0)	31 (7.7)	28 (6.4)	7 (3.0)	12 (2.5)	25 (7.7)	23 (6.4)
	5 Always	3 (1.0)	10 (2.0)	17 (4.2)	13 (3.0)	6 (2.6)	12 (2.5)	14 (4.3)	11 (3.1)
	N	315 (100)	507 (100)	405 (100)	436 (100)	231	480	325	358
	Mean (SD)	1.8 (0.9)	1.7 (1.0)	2.1 (1.1)	1.9 (1.1)	1.7 (1.0)	1.6 (1.0)	2.1 (1.2)	1.9 (1.1)

Table A.10.4. Descriptive statistics for use of medication – sleeping problems

Lkm03	I use prescribed medication for sleep problems	Time 1				Time 2			
		Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)
	1 Never	293 (93.0)	474 (93.9)	383 (94.6)	398 (91.1)	214 (92.6	445 (93.1)	304 (93.5)	327 (91.2)
	2	8 (2.5)	9 (1.8)	6 (1.5)	8 (1.8)	6 (2.6)	12 (2.5)	8 (2.5)	9 (2.5)
	3	8 (2.5)	10 (2.0)	9 (2.2)	14 (3.2)	6 (2.6)	11 (2.3)	8 (2.5)	10 (2.8)
	4	1 (0.3)	6 (1.2)	2 (0.5)	9 (2.1)	2 (0.9)	3 (0.6)	2 (0.6)	5 (1.4)
	5 Always	5 (1.6)	6 (1.2)	5 (1.2)	8 (1.8)	3 (1.3)	7 (1.5)	3 (0.9)	7 (2.0)
	N	315 (100)	505 (100)	405 (100)	437 (100)	231	478	325	358
	Mean (SD)	1.2 (0.6)	1.1 (0.6)	1.1 (0.6)	1.2 (0.8)	1.2 (.63)	1.2 (0.6)	1.1 (0.6)	1.2 (0.7)

Table A.10.5. Descriptive statistics for use of medication – anxiety or depression

Lkm04	I use prescribed medication for anxiety and/or depression	Time 1				Time 2			
		Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)
	1 Never	299 (94.6)	474 (93.9)	372 (91.9)	400 (92.0)	217 (93.9)	449 (93.9(	296 (91.1)	326 (91.1)
	2	4 (1.3)	3 (0.6)	5 (1.2)	9 (2.1)	5 (2.2)	5 (1.0)	5 (1.5)	8 (2.2)
	3	3 (0.9)	5 (1.0)	9 (2.2)	5 (1.1)	-	1 (0.2)	6 (1.8)	5 (1.4)
	4	1 (0.3)	6 (1.2)	4 (1.0)	7 (1.6)	3 (1.3)	4 (0,8)	4 (1.2)	3 (0.8)
	5 Always	9 (2.8)	17 (3.4)	15 (3.7)	14 (3.2)	6 (2.6)	19 (4.0)	14 (4.3)	16 (4.5)
	N	316 (100)	505 (100)	405 (100)	435 (100)	231	478	325	358
	Mean (SD)	1.2 (0.7)	1.2 (0.8)	1.2 (0.9)	1.2 (0.8)	1.2 (0.7)	1.2 (0.8)	1.3 (0.9)	1.3 (0.9)

Table A.10.6. Descriptive statistics for use of medication – natural medicine

Lkm05	I use natural medication for anxiety, depression or sleep problems	Time 1				Time 2			
		Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)
	1 Never	295 (93.4)	476 (94.1)	352 (87.3)	383 (87.6)	215 (93.1)	457 (95.0)	284 (87.4)	319 (89.4)
	2	8 (2.5)	15 (3.0)	22 (5.5)	22 (5.0)	10 (4.3)	12 (2.5)	17 (5.2)	20 (5.6)
	3	9 (2.8)	12 (2.4)	24 (6.0)	25 (5.7)	2 (0.9)	9 (1.9)	17 (5.2)	15 (4.2)
	4	3 (0.9)	1 (0.2)	4 (1.0)	4 (0.9)	2 (0.9)	1 (0.2)	3 (0.9)	3 (0.8)
	5 Always	1 (0.3)	2 (0.4)	1 (0.2)	3 (0.7)	2 (0.9)	2 (0.4)	4 (1.2)	-
	N	316 (100)	506 (100)	403 (100)	437 (100)	231	481	325	357
	Mean (SD)	1.1 (0.5)	1.1 (0.4)	1.2 (0.6)	1.2 (0.7)	1.1 (0.5)	1.1 (0.4)	1.2 (0.7)	1.2 (0.5)

Table A.10.7. Descriptive statistics for Dietary habits – breakfast

		Time 1				Time 2			
Ma01	I eat breakfast	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)
	1 Never	5 (1.6)	12 (2.4)	7 (1.7)	8 (1.8)	1 (0.4)	14 (2.9)	7 (2.2)	4 (1.1)
	2	12 (3.8)	26 (5.1)	14 (3.5)	10 (2.3)	8 (3.5)	25 (5.2)	10 (3.1)	10 (2.8)
	3	17 (5.4)	27 (5.3)	19 (4.7)	13 (2.9)	4 (1.7)	17 (3.5)	12 (3.7)	11 (3.1)
	4	19 (6.0)	29 (5.7)	30 (7.4)	24 (5.4)	14 (6.1)	43 (8.9)	20 (6.2)	18 (5.0)
	5 Always	263 (83.2)	413 (81.5)	334 (82.7)	388 (87.6)	204 (88.3)	382 (79.4)	275 (84.9)	316 (88.0)
	N	316	507	404	443	231	481	324	359
	Mean (SD)	4.7 (0.9)	4.6 (1.0)	4.7 (0.9)	4.8 (0.8)	4.8 (0.7)	4.6 (0.9)	4.7 (0.9)	4.8 (0.7)

Table A.10.8. Descriptive statistics for Dietary habits – lunch

		Time 1				Time 2			
Ma02	I eat lunch	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)
	1 Never	3 (1.0)	1 (0.2)	-	1 (0.2)	1 (0.4)	-	-	1 (0.3)
	2	2 (0.6)	4 (0.8)	6 (1.5)	7 (1.6)	2 (0.9)	1 (0.2)	4 (1.2)	6 (1.7)
	3	5 (1.6)	6 (1.2)	8 (2.0)	11 (2.5)	4 (1.7)	7 (1.5)	9 (2.8)	4 (1.1)
	4	27 (8.6)	48 (9.5)	60 (14.9)	51 (11.5)	21 (9.1)	47 (9.8)	41 (12.7)	43 (12.0)
	5 Always	278 (88.3)	448 (88.4)	330 (81.7)	373 (84.2)	202 (87.8)	426 (88.6)	270 (83.3)	305 (85.0)
	N	315	507	404	443	230	481	324	359
	Mean (SD)	4.83 (0.6)	4.85 (0.5)	4.77 (0.6)	4.78 (0.6)	4.83 (0.5)	4.87 (0.4)	4.78 (0.6)	4.80 (0.6)

Table A.10.9. Descriptive statistics for Dietary habits – dinner

		Time 1				Time 2			
Ma03	I eat dinner	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)
	1 Never	7 (2.2)	6 (1.2)	-	1 (0.2)	6 (2.6)	5 (1.0)	-	1 (0.3)
	2	38 (12.1)	21 (4.2)	9 (2.2)	9 (2.0)	27 (11.7)	20 (4.2)	5 (1.5)	4 (1.1)
	3	59 (18.7)	63 (12.5)	34 (8.4)	26 (5.9)	42 (18.2)	48 (10.0)	25 (7.7)	24 (6.7)
	4	54 (17.1)	89 (17.6)	63 (15.6)	69 (15.6)	42 (18.2)	88 (18.3)	50 (15.5)	60 (16.7)
	5 Always	157 (49.8)	326 (64.6)	297 (73.7)	337 (76.2)	114 (49.4)	320 (66.5)	243 (75.2)	270 (75.2)
	N	315	505	403	442	231	481	323	359
	Mean (SD)	4.00 (1.2)	4.40 (0.9)	4.61 (0.7)	4.66 (0.7)	4.00 (1.2)	4.45(0.9)	4.64 (0.7)	4.65 (0.7)

Block 11: Health behavior

Table A.11.1. Descriptive statistics for exercise

Mo01	How often do you exercise? (a minimum of 30 minutes walking or the equivalent)	Time 1				Time 2			
		Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)
	Never	3 (0.9)	6 (1.2)	1 (0.2)	4 (0.9)	2 (0.9)	3 (0.6)	1 (0.3)	-
	A few times per year	10 (3.2)	11 (2.2)	14 (3.5)	7 (1.6)	8 (3.4)	10 (2.1)	12 (3.7)	5 (1.4)
	A few time per month	47 (14.9)	61 (12.1)	45 (11.1)	34 (7.7)	30 (12.9)	65 (13.5)	37 (11.3)	42 (11.7)
	At least once a week	121 (38.3)	205 40.5	106 (26.2)	133 (30.3)	83 (35.6)	180 (37.4)	83 (25.5)	117 (32.7)
	Several time a week	112 (35.4)	192 (37.9)	180 (44.6)	195 (44.4)	94 (40.5)	185 (38.5)	149 (45.7)	138 (38.5)
	Daily	23 (7.3)	31 (6.1)	58 (14.4)	66 (15.0)	15 (6.5)	38 (7.9)	44 (13.5)	56 (15.6)
	N	316	506	404	439	232	481	326	358

Table A.11.2. Descriptive statistics for tobacco use – cigarettes

To01	Do you smoke?	Time 1				Time 2			
		Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)
	Yes	35 (11.1)	40 (7.9)	52 (12.8)	38 (8.7)	19 (8.2)	36 (7.5)	42 (13.0)	23 (6.4)
	No	281 (88.9)	465 (92.1)	353 (87.2)	401 (91.3)	213 (91.8)	444 (92.5)	282 (87.0)	335 (93.6)
	N	316	505	405	439	232	480	326	358

Table A.11.3. Descriptive statistics for tobacco use – snuff

To02	Do you take snuff?	Time 1				Time 2			
		Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)
	Ja	59 (18,7)	49 (9,7)	45 (11,1)	35 (8,0)	41 (17.7)	49 (10.2)	31 (9.5)	27 (7.5)
	Nej	257 (81,3)	457 (90,3)	359 (88,9)	405 (92,0)	191 (82.3)	432 (89.8)	294 (90.5)	331 (92.5)
	N	316	506	404	440	232	481	325	358

Table A.11.4. Descriptive statistics for alcohol consumption (only used in Sample 2)

Al01	Do you drink alcohol?	Time 1				Time 2			
		Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)
	Yes	-	478 (94,5)	-	-	-	455 (95.0)	-	-
	No	-	28 (5,5)	-	-	-	24 (5.0)	-	-
	Total	-	506	-	-	-	479	-	-

Table A.11.5. Descriptive statistics for alcohol consumption – how often

Al02	How often do you drink alcohol	Time 1				Time 2			
		Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)
	Never (Skip to question XXX)	16 (5.1)	16 (3.2)	30 (7.5)	52 (11.8)	11 (4.7)	17 (3.6)	36 (11.1)	36 (10.1)
	Once a month at the most	43 (13.7)	80 (15.9)	87 (21.6)	71 (16.2)	30 (12.9)	65 (13.69)	72 (22.3)	61 (17.0)
	2-4 times per month	179 (56.8)	242 (48.0)	219 (54.5)	207 (47.2)	138 (59.5)	247 (51.7)	155 (48.0)	153 (42.7)
	2-3 times per week	73 (23.2)	153 (30.4)	63 (15.7)	95 (21.6)	48 (20.7)	131 (27.4)	58 (18.0)	96 (26.8)
	4-6 times per week	4 (1.3)	13 (2.6)	3 (0.7)	12 (2.7)	5 (2.2)	16 (3.3)	2 (0.6)	11 (3.1)
	Daily	-	-	-	2 (0.5)	-	2 (0.4)	-	1 (0.3)
	N	315	504	402	439	232	478	323	358

Table A.11.6. Descriptive statistics for alcohol consumption – how often

Al04	How often do you get drunk?	Time 1				Time 2			
		Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)
	Never	95 (31.8)	170 (35.1)	203 (53.8)	218 (54.8)	84 (38.0)	152 (33.0)	158 (54.9)	181 (56.7)
	Once a month at the most	159 (53.2)	253 (52.2)	146 (38.7)	154 (38.7)	109 (49.3)	229 (49.7)	113 (39.2)	119 (37.3)
	2-4 times per month	30 (10.0)	54 (11.1)	20 (5.3)	20 (5.0)	19 (8.6)	67 (14.5)	14 (4.9)	16 (5.0)
	Once a week	15 (5.0)	8 (1.6)	7 (1.9)	5 (1.3)	9 (4.1)	13 (2.8	3 (1.0)	3 (0.9)
	2-3 times per week	-	-	1 (0.3)	1 (0.3)	-	-	-	-
	>3 times per week	-	-	-	-	-	-	-	-
	Daily	-	-	-	-	-	-	-	-
	N	299	485	377	398	221	461	288	319

Table A.11.7. Descriptive statistics for alcohol consumption – amount

Al03	How many glasses equivalent to one glass of wine do you usually drink in an occasion or sitting?	Time 1				Time 2			
		Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)	Sample 1 N (%)	Sample 2 N (%)	Sample 3 N (%)	Sample 4 N (%)
	0-2	148 (49.5)	280 (57.5)	222 (59.2)	246 (63.1)	107 (48.4)	248 (53.7)	175 (60.6)	210 (65.2)
	3-4	111 (37.1)	159 (32.6)	127 (33.9)	129 (33.1)	89 (40.3)	163 (35.3)	90 (31.1)	93 (28.9)
	5-6	29 (9.7)	38 (7.8)	21 (5.6)	14 (3.6)	21 (9.5)	40 (8.7)	21 (7.3)	17 (5.3)
	7-9	9 (3.0)	8 (1.6)	5 (1.3)	1 (0.3)	2 (.9)	9 (1.9)	2 (0.7)	2 (0.6)
	>9	2 (0.7)	2 (0.4)	-	-	2 (.9)	2 (0.4)	1 (0.3)	-
	N	299	487	375	390	221	462	289	322

Block 12: House work

Table A.12.1 Factor analysis results, reliability, and descriptive statistics for the scale measuring Work hours in the home, household chores

		Time 1				Time 2			
	House maintenance	Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Ah01	Washing/Ironing	.88	.8	.73	.75	.88	.84	.70	.78
Ah02	Purchasing of food	.83	.8	.76	.80	.83	.80	.80	.78
Ah03	Cooking	.81	.85	.77	.76	.81	.81	.78	.77
Ah04	Washing up	.76	.72	.75	.72	.76	.70	.73	.73
Ah05	Cleaning (e.g., vacuum cleaning, making the bed, tidying)	.84	.84	.78	.76	.84	.84	.76	.75
Ah10	Purchase of clothing, household items	.84	.78	.73	.75	.84	.80	.74	.74
Eigenvalue		4.11	3.85	3.42	3.45	4.11	3.84	3.39	3.45
Variance explained		68.55	64.21	56.94	57.44	68.53	64.00	56.47	57.45
α		.93	.91	.88	.89	.93	.91	.89	.89
N		311	504	404	440	200	479	325	359
M		3.18	3.54	3.68	3.64	3.13	3.53	3.70	3.63
SD		1.01	0.94	0.86	0.87	0.98	0.94	0.84	0.86

Note: Measured on a 1-5 scale.

Table A.12.2. Factor analysis results, reliability, and descriptive statistics for the scale measuring Work hours in the home, House maintenance

		Time 1				Time 2			
	House maintenance	Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Ah06	Gardening/Mowing the lawn/Caring for plants	.63	.52	.50	.61	.63	.50	.52	.62
Ah07	Economy (savings, tax, bills)	.33	.46	.34	.53	.33	.48	.36	.54
Ah08	Maintenance / House repairs	.96	.91	.92	.93	.96	.95	.90	.93
Ah09	Maintenance / Car repairs	.90	.87	.88	.87	.89	.88	.87	.86
Eigenvalue		2.23	2.06	1.97	2.28	2.22	2.15	1.97	2.28
Variance explained		55.65	51.58	49.27	56.93	55.51	53.82	49.24	56.98
α		.78	.78	.75	.82	.78	.79	.75	.82
N		300	475	386	420	198	448	308	347
M		3.90	3.43	3.06	3.07	3.92	3.40	3.05	3.09
SD		1.00	1.04	1.02	1.13	0.97	1.07	1.01	1.09

Note: Measured on a 1-5 scale.

Table A.12.3. Factor analysis results, reliability, and descriptive statistics for the scale measuring Work hours in the home, Childcare

		Time 1				Time 2			
	Child care	Sample 1	Sample 2	Sample 3	Sample 4	Sample 1	Sample 2	Sample 3	Sample 4
Ah11	Childcare feeding, washing, dressing	.85	.79	.77	.93	0.85	.92	.76	.93
Ah12	Driving / Collecting children	.63	.82	.75	.74	0.63	.76	.75	.74
Ah13	Putting children to bed	.66	.82	.82	.83	0.66	.76	.82	.83
Eigenvalue		1.55	1.96	1.83	2.09	1.55	1.99	1.83	2.09
Variance explained		51.67	65.48	60.99	69.78	51.67	66.32	60.99	69.78
α		.75	.85	.82	.87	.75	.85	.82	.87
N		123	208	119	129	72	184	89	.91
M		2.92	3.21	3.27	3.32	3.02	3.22	3.28	3.39
SD		0.60	0.72	0.83	0.85	0.67	0.69	0.77	0.84

Note: Measured on a 1-5 scale.