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The Modern Working Life: Its Impact on Employee Attitudes, Performance and Health

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SAL TSA – JOINT PROGRAMME
FOR WORKING LIFE RESEARCH IN EUROPE
The National Institute for Working Life and The Swedish Trade Unions in Co-operation

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Foreword

This report is the result of a pilot study initiated by SALTSA but undertaken in close co-operation with similar studies carried out in France, Spain and the United Kingdom at the initiative of *l'Université Européenne du Travail*, a joint undertaking by social partners in France. The underlying idea is a hypothesis that, even with generous formal decision latitude, a combination of vague targets and limited resources in a job situation might lead to adverse health effects. A key word in this context is *performance*. It is increasingly used in modern working life, including salary negotiations, but rarely defined - in contrast with terms like production or productivity.

A fair amount of personal freedom in working life is usually considered an advantage and a privilege compared to routine jobs or conveyor band jobs, where the worker can exert little or no influence on his own situation, the targets, the job content or the pace of work. However, it is hypothesized that growing numbers of employees in modern working life are working with vaguely defined tasks and expectations as well as insufficient resources, a situation which would be a risk of burning-out processes.

Many tasks in modern working life require personal initiatives, ingenuity, flexibility and adaptability. The reverse of the medal might be uncertainty about the employer's or the clients' expectations. Thus it is often difficult to foresee how the results of one's endeavours will be assessed. In many cases it might also be difficult to estimate the effort and time that will be needed to reach a certain end. Even worse, if time and other resources are too short, conflicts between quantitative and qualitative expectations might arise. Thus serious mismatch between demands and expectations on one hand and available time and other resources on the other would constitute risk situations, posing a threat to the health and well-being of the employees. Working speed is a frequent problem and new health effects, like stress disorders and burnout, are increasing, but so are stress-related physical accidents and psychosomatic disorders. It has been shown, for example by the European surveys of working conditions, that working situations have not generally improved. Old problems, like heavy loads, painful working positions and exposure to noise show no decreasing tendencies. Combinations of physically trying work and imperfect work organisation constitute high-risk situations. Thus, musculo-skeletal strain injuries, which are a dominant health problem in Europe, can be considered not only as physical disorders but also as manifestations of psychological stress.

In Sweden, a tradition of influence, participation and co-determination at work has evolved throughout much of the 20th century and also become legally manifest mainly through the Co-Determination Act and several treaties based on this act. In reality, though, the possibility to exert an influence on one's own work might be illusive for reasons described above. During the 1990s, new types of work organization have emerged and their effects upon the health of workers have not

been sufficiently explored. What looks like a flexible work organisation might in reality imply an intensification of work, especially in combination with ill-defined performance expectations. This pilot study is first step in an exploration of this complex phenomenon. The results are published in two volumes – one of which presents a literature review and the other one is based on a limited field study.

We would like to express our sincere thanks to the department of psychology at the University of Stockholm and particularly to Johnny Hellgren and Caroline van der Vliet who have carried out this pilot study.

On behalf of the SALTSA committee for Work Environment and Health

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Introduction

The general aim of this study is to investigate how employees in today's modern working life experience their work situation and to furthermore examine how these experiences relate to work attitudes, performance, and health. The qualitative part of the study seeks to give a deeper insight into the issue of performance as a concept and how it can relate to pay.

The nature of work has changed in recent decades due to industrial restructuring, technological advancements, economic recessions and intensified global competition (Howard, 1995). The world is shrinking at a faster rate than ever before, distances are shorter, and events in other parts of the world are getting all the nearer and effect us more immediately than in the past. National boundaries are of increasingly less importance. This has resulted in a great deal of change in the fundamental conditions central to the organization of work (Wikman, 2000, 2001).

Today's organizations and their employees need to be able to adjust quickly to an ever-changing world. This is applicable to both private companies as well as state-run organizations. It is not only an organization's competitors who create this pressure for flexibility, but also an organization's customers and dominant shareholders. It has been observed that the pressure exerted by shareholders is comparable to the pressure a government can exert when they stress increased customer satisfaction and quality (Burchell et al., 1999). This type of governmental pressure brings about, according to the authors, the same financial effects as increased market pressure does on organizations with marketed services.

With the intent of increasing competitiveness and reducing labor costs, many organizations have turned to downsizing, layoffs, and restructuring. In many cases this can result in a lesser number of employees carrying out the same amount of work (Hellgren & Sverke, 2001). This view is also supported by Statistic Sweden (1997), who report that an entire 60 percent of the Swedish work force experience an increased amount of time pressure in their work. This striving after flexibility by organizations has brought about changes in employment contracts, and resulted in the need for employees to have new types of skills. New alternative employment arrangements help create numerical flexibility. Many work places make use of temporary employment contracts. These temporary contracts are, however, only utilized to a limited extent— usually to fulfill a temporary production need or want in competence. By not permanently connecting all employees to the organization, companies place a portion of the uncertainty outside of the company; in other words, uncertainty is placed on the shoulders of those with temporary employment (Wikman, 2001). The fact that women, to a greater extent than men, are found in the most unfavorable types of employment raises issues of gender and equality in the changing labor market.

A discernible trend, in the modern working life, is the shifting from a manufacturing to service based economy (Furåker, 1995; Lundberg & Gonäs,

1998). This indicates that modern work is characterized, to a greater extent, by mental rather than, as previously emphasized, physical qualities. Work, in the modern working life, often involves interpreting and understanding the needs and expectations of the customer. A good interpretation is thus the goal, which means that both the ultimate goal and the path to that goal are characterized by unpredictability. The fact that today's work does not result in finished, concrete products shows that work has become more indistinct (Allvin, Wiklund, Härenstam & Aronsson, 1999). This, together with increased flexibility, leads to difficulties in measuring and defining performance. Performance can be seen as a term replacing what was previously called productivity and efficiency (Wallenberg, 2000). Wallenberg (2000) maintains that good performance is that which contributes to quality and the attainment of organizational goals. It is therefore important to increase the awareness of organizational goals and to discuss the concept of quality in the process of defining what constitutes good performance.

In modern working life, employees are expected to be autonomous and self-governing, which requires that they possess a great deal of skill and confidence in their own abilities (Allvin, Aronsson, Hagström, Johansson, Lundberg & Skärstrand, 1998). In most circumstances autonomy has a positive ring to it. However, in order for autonomy to bring about any positive consequences for both the individual and the organization, it is necessary for individuals to know what to do and, not least of all, how they should do it (Allvin et al., 1999). If autonomy is combined with vaguely defined work tasks and expectations, as well as with insufficient resources, the situation will be problematic (Allvin et al., 1998). Unclear demands and expectations can lead to feelings of insecurity and anxiety (Allvin et al., 1999). The quest for increased flexibility has given rise to not only workload pressure but also led to employees working more (Burchell et al., 1999). A comparative study has shown that Sweden is somewhat unique, when compared to other European countries, in that overtime is commonly used to promote flexibility (Cranfield Network, 1996; cited in Aronsson & Göransson, 1997).

That people can easily be reached with the help of modern information technology, together with the fact that work today is usually of a mental rather than a physical nature, have led to difficulties in mentally recognizing the temporal boundaries of work, and thus made it all the more difficult to relax during leisure time. That working life, in many cases, has encroached on leisure time constitutes a danger since rest and recovery are important for managing and meeting new demands. Further difficulties arise in connection with the fact that many of today's work assignments can be carried out better than satisfactorily and do not result in a final, concrete product (Allvin et al., 1999; Aronsson & Svensson, 1997). This circumstance can lead to employees overworking themselves for lack of signals which would indicate the work is done (Ahlberg-Hultén, 1999).

The development of the labor market seems to have affected the psychosocial work environment and, as a consequence, the workers health as well. The number of people on long-term sick-leaves has risen significantly over the past few years (Lidwall & Skogman Thoursie, 2000). In a report from the National Social Insurance Board (RFV 2002:4), support is given to the hypothesis that the rise in

individuals on sick-leave is partly due to work related stress. This conclusion is based on the fact that stress related symptoms and a variety of neurotic states (e.g. depression, stress reactions and anxiety) are the reasons for going on sick-leave that have increased the most. The report goes on to show that sick-absences due to psychological causes are significantly more common in those professions described in the study as "entailing demands on a theoretical education" i.e. mostly white-collar workers.

With the above as a background, the study focuses on the work situation's effects on attitudes, performance, and health. We also investigate whether differences exist between the sexes in the area of health and also how each gender experiences the work situation. Another factor that can conceivably affect one's experiencing of the work environment is type of employment. Lastly, even which type of company a person works for can have an effect on how the work environment is experienced. Accordingly, we also examine if differences in work situation experiences and health exist among employees with various types of employment contracts, and if such differences may also be found among privately and publicly employed workers.

Theoretical Background

The creation of a work environment that is motivating and conducive to involvement can be seen as vital to an organization's ability to establish a competitive advantage. How employees interpret the organizational environment has an effect on their attitude, motivation, performance, and well-being (Brown & Leigh, 1996; Sverke, Hellgren & Öhrming, 1999). An employee's subjective impressions of the work situation and her perception of the significance of the work is that which James and his colleagues call the psychological work climate (James, Hater, Gent, & Bruni, 1978; James & James, 1989; James & Sells, 1981). The psychological climate therefore has to do with how employees experience and interpret the organizational environment. The fact that one's experience is subjective implies that two people in the same work situation can experience the situation completely differently. This is due to individual factors and perceptual biases which affect how individuals interpret situations (Brown & Leigh, 1996; James et al., 1978; James & James, 1989). The psychological climate is then an attribute of the individual rather than the objective situation. How the individual experiences the work situation is what affects her attitudes and behavior: not the actual work situation. This is the reason why it is so very important to study the psychological climate— to better understand the employees' experiences and reactions (James & Jones, 1974).

That which directly affects an employee's work situation, known as proximal factors (e.g. feedback at work and the challenges of everyday work), has a more significant bearing on an employee's interpretation of the work situation than other so-called distal factors (e.g. an organizations size) that are thought to have a more complex and indirect effect on an employee's work experiences. Temporary

alterations and exceptional situations do not significantly affect an employee's experiences; it is rather those permanent elements of work that provide the foundation for the psychological climate.

An individual's attitude, behavior, and health are all affected by how that individual experiences her surroundings. People's attitudes towards objects in their environment are shaped by perceptual and cognitive processes. These attitudes then affect the person's behavior towards the object. Such attitudes often lean in a definite direction, such as in favor of or against the object. (Allport, 1935). According to Rosenberg and Hovland (1960), an attitude is composed of three parts: an affective, a cognitive, and a behavioral component. The affective component includes feelings, values, and emotional states; the cognitive component is made up of beliefs concerning whether something is true or false; and, lastly, the behavioral component is comprised of intentions and the decision to act. From this perspective, attitudes fall between stimuli (e.g. object, people, process) and the responses to these stimuli. According to this tripartite approach, all responses to objects or stimuli are subject to the person's attitude towards the object. Ajzen and Fishbein (1980) share this view to a certain extent. According to these authors, an internal hierarchical relationship exists amongst the three components of attitude, in which cognition precedes affect which, in turn, precedes intention. Within the context of an organization, these components of attitude can be identified as job involvement (cognition), job satisfaction (affect), and turnover intention (behavior).

How the psychological climate is experienced, together with attitude towards work, have consequences for both the employee and the organization. Research has shown a connection between psychological climate, attitudes of the individual (e.g. job satisfaction), and organizational attitudes (e.g. an organization's commitment). Research also indicates there are not only short-term but long-term consequences to psychological climate experiences. In the long-term, the individual's physical and mental health can be affected, and, at the organizational level, lay-offs and work output can be influenced (Brown & Leigh, 1996; Jackofsky & Slocum, 1988; James & Sells, 1981; Sverke et al., 1999). Research has shown that a motivational and engaging psychological climate stimulates better work performances (Brown & Leigh, 1996). This is due to the fact that those people who feel they can have their psychological needs met at work have a tendency to get more involved and dedicate an increased amount of time and energy to their work (Pfeffer, 1994). What constitutes good performance is, however, difficult to define. The shift in focus from goods production to the delivery of services (Furåker, 1995) has made performance all the more difficult to define and measure. This is all complicated further by the fact that the tendency has been towards more qualified and independent work practices. The need to define performance is nevertheless of utmost importance since organizations are turning to pay-for-performance systems more often than ever before.

There has been a call for a new type of compensation system which can accommodate the new needs and nature of modern work, and, with that, a more direct connection between pay and performance (Carlsson & Wallenberg, 1999; le

Grand, 1996; Wallenberg, 2000). Individual and performance-based pay is thought to stimulate employees' motivation, which, in turn, is thought to lead to better performance (Wallenberg, 2000). Wallenberg's (2000) study indicates that people are, in general, positively disposed to performance-based pay. The problem lies in determining how and by whom performance should be evaluated. The continuing trend of work being more independent and qualified makes it increasingly more difficult to supervise the performance of employees, which makes it a challenge to establish a clear link between performance and pay. If performance appraisal is to be an effective tool in creating a connection between performance and pay, in a pay-for-performance system, employees must have significant control over those variables that affect their individual performances (Cascio, 1995). A reward system based on performance is thought to be extremely stressful for individuals who do not know what is expected of them and individuals who cannot affect their results.

In many cases, performance evaluations are based on the subjective judgement of supervisors. Questions have been raised over whether more objective, expertly formulated criteria would be more appropriate. Wallenberg (2000) claims that this is not the case if this type of objective criteria leads to pay not being linked to the workplace, production or the supervisor. The author instead advocates linking pay-rate evaluation to unique conditions and a competent supervisor's ability to observe employees. Hedge and Borman (1995) contend that additional sources, besides the nearest supervisor, are needed in order to evaluate performance.

Another characteristic of the modern working life that may have an influence on an individual's interpretation of the psychological climate is employment type. New and alternative employment arrangements are used by organizations in order to create numerical flexibility. Several different terms have been used to describe the trend of utilizing temporary contracts: flexibilization (Sparrow & Marchington, 1998), peripheralization (Dale & Bamford, 1988), and externalization (Pfeffer & Baron, 1988). Aronsson, Gustafsson, and Dallner (2000) see this development as the progressive expansion of a central-peripheral pattern involving work types and work conditions. From such a graphical perspective, we find those with permanent contracts nearest to the center and employees under various temporary employment contracts on the other layer. The self-employed and free-lance workers are located on the layer which is next furthest out from center, and furthest out on the periphery are the unemployed. Those who are in the center have the most favorable work situations and conditions, while those who find themselves in temporary positions have the least favorable situations. It is nevertheless important to point out that the majority of work contracts are still of the traditional sort (Sverke, Gallagher & Hellgren, 2000).

One issue facing the changing labor market concerns the fact that women, to a greater extent than men, are to be found in the most unfavorable types of employment, which raises questions concerning gender and equality. Many temporary jobs are to be found within traditional women's professions (Aronsson & Göransson, 1998). Men have always had more influence and control over their work in comparison to women (Statistic Sweden, 1997); and despite the fact that today's young women, on average, are somewhat better educated than their male

counterparts, women are still more prevalent in less qualified types of work (Lundberg & Gonäs, 1998). Both men and women have the most influence over their work situations in professions which are highly gender integrated, but, even amongst this group, women have somewhat less influence than men (Hall, 1990). Fransson-Hall, Byström & Kilbom (1995) have found that women and men perform different tasks, even if they work at the same workplace and have the same job description.

The concept of stress is of central importance when examining how the psychosocial work environment affects health and well-being (Johansson, 1991). Stress is defined as being an interaction between the individual and the situation (Lazarus, 1971). When the individual experiences a mismatch between perceived demands and the perception of his capability to meet the demands, stress occurs. Another factor that affects whether stress is experienced is the perceived cost of not coping. For stress to occur, a person must, in part, feel that the demand is beyond her capabilities, and also that the consequences of not coping are serious (Lazarus & Folkman, 1984). The experiencing of stress is thus determined by the cognitive appraisal of both the situation and one's capabilities rather than any objective view of the situation or capabilities in question (Ahlberg-Hultén, 1999). If the person manages to cope with the situation, no negative stress reaction will occur (Cox, 1978). Stress triggers a biological reaction by activating different biological systems which increase a person's ability to perform and adapt to new situations. When these systems are repeatedly activated without the opportunity for recovery or rest, there is a risk for both physical and mental stress-related ill-health (Allvin et al., 1998).

The fact that employees in the private and public sector partly are exposed to different environmental demands and conditions may also have an influence on their psychological work climate experiences (Aronsson, Bejerot & Härenstam, 1999; Furåker, 2000; Kinnunen & Nätti, 1994). The present study has therefore deliberately chosen to compare a state-run company and a private company in order to identify any possible differences in attitudes, performance, health, and how the psychological work climate is experienced.

Purpose and Research Questions

The present study aims to investigate and map out those aspects of the psychological climate that are consequential to an employee's attitudes, performance, and health. The qualitative portion of the study aims to more thoroughly delve into the issue of performance as a concept and how performance can be related to pay.

Research Questions:

- Which factors of the psychological climate have an influence on attitudes, performance, and health, in the respective organizations?
- Are there main or interaction effects of gender and type of organization on perceptions of work climate and health?
- Are there variations among individuals with different employment contracts in how they experience the psychological climate and health?
- How is an individual's performance evaluated and how does this relate to the assessment of an individual's pay?

Method

Sample

The empirical material for the present study is obtained from a questionnaire survey and an interview study. The questionnaire study was conducted both at a private company and at a large agency in the public sector, whereas the interviews were only conducted at the private company. The agency in the public sector will from this point on be referred to as organization A, and the private company will be referred to as organization B. A total of 422 questionnaires were distributed, 272 of these in company A, and 150 in organization B. From organization A, 195 usable questionnaires were returned for a response rate of 75 percent. Those on leave of absence, sick or parental leave, early retirement, or of unknown address were excluded from the total sample. From organization B, 92 questionnaires were returned for a response rate of 61 percent. The average age of the respondents in organization A was 48 years (SD=10,48), with the youngest participant being 24 and the oldest 66 years of age. Women constituted 53 percent of the respondents. In organization B the average age was 46 years old (SD=10,27), with the youngest participant being 26 and the oldest 64 years old. In this organization only 30 percent were women.

Procedure

In both organizations the distribution of the questionnaire was preceded by an email to all persons concerned. The email contained information regarding the study and its objectives, as well as a short presentation of the researchers. The researchers obtained a list with addresses of everyone working at one of the organization A offices. In May 2002 questionnaires were mailed to the homes of the employees accompanied by a letter describing the general purpose of the study, assuring the respondents that their participation was entirely voluntary and that their responses would be treated in confidence. A postage-paid envelope, with the address of the researchers pre-printed, was also included. Approximately three weeks after the first mailing, a postcard was sent to those who had not returned their questionnaires reminding them to do so.

At the other participating organization (B), the questionnaires were distributed at the company and delivered to the employees' office mailboxes. Representatives at each participating department drew samples from their staff. The questionnaires were accompanied by the same informational letter as was sent out to organization A. There was also information regarding the return of the questionnaires. They were to be put in sealed envelopes included in the mailing and dropped off in a box in the lobby of the company. After approximately three weeks, a reminder was sent out over email to employees in the participating departments. Those not participating in the questionnaire were asked to please ignore the reminder.

Questionnaire

Apart from demographics, which were assessed using single items, the study variables were measured with multiple indicators and responses given on Likert-type scales ranging from 1 (strongly disagree) to 5 (strongly agree). Exceptions from this are the General Health Questions which have a response scale ranging from 1 (never) to 4 (always), and the questions regarding health complaints where 1 represents never or almost never and 5 represents always or almost always. Indices were constructed by averaging the relevant items after negatively phrased items had been reverse-coded. The tables in the appendix show intercorrelations, descriptive statistics, and reliabilities (Cronbachs α) for each participating organization.

With a few exceptions the reliability estimates reach 0.70 or higher, which means that most of the measures show adequate measurement qualities (Nunnally, 1978).

Work Factors

Job Autonomy was measured by four items (e.g. "I have satisfactory influence over decisions concerning my job"). The scale was developed by Sverke & Sjöberg (1994) and is based on Hackman & Oldham (1975) and Walsh, Taber & Beehr (1980) ($\alpha=0.80$).

In order to measure Job Challenge three items were used (e.g. "I'm learning new things all the time in my job"), developed by Hellgren, Sjöberg & Sverke (1997) ($\alpha=0.72$).

Knowledge of results was measured by five statements (e.g. "I usually know whether or not my work is satisfactory on this job") developed by Hackman & Oldham (1975) ($\alpha=0.80$).

Quantitative Role Overload was measured by three statements (e.g. "It fairly often happens that I have to work under a heavy time pressure") focusing on whether work is perceived as being done under time pressure and stress. This scale was developed by Beehr, Walsh, & Taber (1976) ($\alpha=0.85$).

Qualitative Role Overload was measured by five statements (e.g. "I feel unreasonable demands in my work") reflecting whether the individual feels she has too much responsibility and experiences too high demands in her work. The scale was developed by Sverke, Hellgren, & Öhrming (1997) ($\alpha=0.67$).

In order to measure Role Conflict five questions were used (e.g. "I receive incompatible requests from two or more people"). The scale is a translated and slightly modified version of Rizzo, House, & Lirtzman (1970) ($\alpha=0.79$).

Role Ambiguity was measured with four items (e.g. "Clear, planned goals and objectives exist for my job" R). The scale consists of a combination of items Rizzo, House, & Lirtzman (1970), and Caplan (1971) ($\alpha=0.81$).

Influence/Control over Work was measured by three statements developed by Ashford, Lee, & Bobko (1989) (e.g. "In this organization I can prevent negative things from affecting my work situation") The scale was originally designed to measure powerlessness but was here reversed to detect control ($\alpha=0.78$). See Barling and Kelloway, (1996).

Social Support was measured by three items (e.g. "My work place is characterized by fun and camaraderie"). The scale was developed by Hovmark & Thomsson (1995) ($\alpha=0.83$).

Organizational factors

Centralization in Decision-making was measured by three statements (e.g. "Only persons in supervisory positions are involved when it comes to decisions on how to deal with issues regarding work"). This scale is based on Mellor, Mathieu & Swim (1994) ($\alpha=0.73$).

In order to measure Job Insecurity three items were used (e.g. "I worry about being laid off within the next year"). The scale was developed by Hellgren, Sverke & Isaksson (1999) ($\alpha=0.81$).

Gender Equality was measured by three items (e.g. "I believe women and men are treated equally at my work place"). This scale was developed by the research team for the purpose of this study. ($\alpha=0.84$).

Overall Justice was measured by three statements (e.g. "I believe my employer treats me fairly"). This scale was developed by the research team for the purpose of this study ($\alpha=0.90$).

Attitudinal variables

In order to measure Job Satisfaction three items were used (e.g. "I am satisfied with my job"). This scale was developed by Hellgren et al., (1997) and adopted from Brayfield & Rothe (1951) ($\alpha=0.90$).

Organizational Commitment was captured by five items (e.g. "I feel my self to be part of my organization"). The scale was designed to reflect the scales of Allen & Meyer (1990), Mowday, Steers & Porter (1979), Cook & Wall (1980), and Guest & Dewe (1991) ($\alpha=0.86$).

Turnover Intention was measured by three questions (e.g. "I feel that I could leave this job"). The scale was developed by Sjöberg & Sverke (1996) and based on items from Lyons (1971) and Camman, Fishman, Jenkins & Klesh (1979) ($\alpha=0.84$).

Performance measures

Perceived Performance was measured by six statements (e.g. "I believe that I perform my job well"). Based on Hall & Hall (1976) and modified by Sverke & Hellgren (1998) ($\alpha=0.78$).

Experienced Responsibility for Work Outcomes was measured by three items (e.g. "I feel I should personally take the credit or blame for the results of my work on this job") developed by Hackman & Oldham (1975) ($\alpha=0.60$).

Health

In order to capture Work-Life Imbalance four statements were used (e.g. "The demands of my work affect my private life adversely"), based on Netemeyer, McMurrian & Boles (1996).

Mental Health Complaints were measured by Goldbergs (1972) general health questionnaire ($\alpha=0.89$).

Physical Health Complaints were measured by a version of Anderssons (1986) health complaints scale, modified by Isaksson & Johansson (1997).

The interview study

The interviews were conducted in groups and have been of a thematic, semi-structured nature. This means that the interviews were designed to cover subject areas that had previously been determined as central. A few pre-designed questions have been supplemented by follow-up questions and topics for discussion. Group interviews are appropriate for illuminating issues of the type focused upon in this study. Such interviews facilitate discussion and make it easier to arrive at a more comprehensive picture, and also allow the story to be told within its context (Patton, 1987; Steyaert & Bouwen, 1994).

The interview study does not cover the aspects captured by the questionnaire. It contributes to a general knowledge of the phenomena, with its concentrated and deep focus, rather than through quantity and statistical generalization. In the area of qualitative methods, a wide and varied sample is generally considered to increase the possibility of being able to focus in on the variations that are relevant for the phenomenon under study; and so our understanding of how the content and meaning of the phenomenon can manifest themselves becomes greater. (Bakan, 1969; Karlsson, 1993). From this reasoning it follows that it is not the great variety, but rather the degree of depth that enriches the understanding of the phenomenon. By using a stratified sample from a group of relevant respondents, a "saturation effect" can be reached relatively quickly in which no new information can be added that would contribute to the understanding of the phenomenon (Miles & Huberman, 1994; Strauss & Corbin, 1990).

A total of two group interviews were conducted, as well as one individual interview. The first group interview was conducted with union representatives, the second interview with employees. The individual interview was conducted with a manager of human resources. All interviews were carried out in the private organization. The interviews lasted about an hour each and were all recorded on

tape and later transcribed. These transcriptions were then analyzed and interpreted by the authors separately before combining the analyses and reaching an integrated result. This was done in order to increase the reliability and validity of the results of the interviews (Cassell & Symon, 1994).

Results

Descriptive statistics and intercorrelations for all study variables are presented in Appendix A. In Table 1 we test for direct effects of gender and organizations, as well as the interaction-effects using Multivariate Analysis of Variance (MANOVA) with regard to work factors and organizational factors. The results show significant multivariate effects of organization (Multivariate $F = [13,262] = 3.80, p < .05$). There were significant univariate differences between the organizations in quantitative- ($F = [13,262] = 8.01, p < .01$), as well as qualitative workload ($F = [13,262] = 14.60, p < .001$), where organization B shows higher levels of experienced qualitative and quantitative workload. Furthermore, we can see that the employees in organization B experience significantly higher levels of social support at their job ($F = [13,262] = 17.14, p < .001$). The perceived gender equality is also higher in organization B ($F = [13,262] = 4.05, p < .05$).

There was a significant multivariate effect of gender as well (Multivariate $F = [13,262] = 2.49, p < .05$). However, significant univariate effects were obtained only with respect to gender equality, where men reported significantly higher gender equality ($F = [13,262] = 17.11, p < .001$) compared to women.

The MANOVA also revealed a significant interaction between gender and organization (Multivariate $F = [13,262] = 2.43, p < .05$). There were significant univariate interaction effects concerning job autonomy ($F = [13,262] = 3.88, p < .05$); we can observe the highest level of reported autonomy among men at organization A, whereas the lowest levels of autonomy were found among the women in the same organization. Furthermore, there is a univariate effect regarding role conflict ($F = [13,262] = 6.83, p < .01$), where we see that the men in organization B experience the most role conflict, whereas women in the same organization report the lowest levels of role conflict. Finally, we find a difference regarding job insecurity ($F = [13,262] = 5.70, p < .05$). Those who experience the highest levels of insecurity are the men in organization B. The men in organization A are the least insecure.

Table 1. Mean values in work climate, and tests for direct and interaction effects of gender and organization.

	A		B		Total Mean		Effects (F)		
	Women Men	Women Men	A	B	A	B	Org.	Gender O x G	
<u>Work Factors</u>									
Job Autonomy	3.54	3.78	3.72	3.58	3.66	3.65	0.01	0.23	3.88*
Job Challenge	3.44	3.69	3.70	3.65	3.56	3.68	1.10	0.81	1.87
Feedback	3.21	3.13	3.44	3.33	3.17	3.39	3.70	0.73	0.01
Quant. Workload	2.98	3.10	3.46	3.39	3.04	3.43	8.01**	0.03	0.55
Qual. Workload	2.05	2.18	2.55	2.43	2.12	2.49	14.60***	0.01	1.51
Role Conflict	2.44	2.37	2.22	2.73	2.41	2.48	0.42	3.66	6.83**
Role Ambiguity	2.43	2.59	2.55	2.41	2.51	2.48	0.07	0.00	1.55
Control	2.69	2.93	2.88	2.90	2.81	2.89	0.41	1.15	0.77
Social Support	3.03	3.21	3.77	3.62	3.12	3.70	17.14***	0.01	1.47
<u>Organizational Factors</u>									
Centralization	3.21	3.11	3.07	3.03	3.16	3.05	0.66	0.28	0.04
Job Insecurity	2.65	2.41	2.46	2.76	2.53	2.61	0.45	0.06	5.70*
Gender Equality	3.03	3.71	3.45	3.81	3.37	3.63	4.05*	17.11***	1.66
Justice	3.05	3.19	3.44	3.28	3.12	3.36	3.28	0.01	1.29

** p < .01, *** p < .001, df = 1,278.

Next, we tested for direct and interactional effects of employment status and organization with respect to work factors and organizational factors. No significant overall effect of organization was found (Multivariate $F=[14,258]=1.20, p>.05$). The MANOVA showed no significant overall interaction effect between organization and employment contract (Multivariate $F=[14,258]=1.13, p>.05$). The MANOVA did, however, detect a significant overall effect of employment contract (Multivariate $F=[14,258]=2.63, p<.05$), regardless of organization, which thus indicates there were overall differences in study variables between full-time, part-time, and contingent workers.

The univariate follow-up tests (presented in table 2) indicate differences between type of employment contracts in level of job challenge ($F=[13,261]=13.38, p<.001$). The post-hoc test for group differences (Sheffe) shows that contingent workers experienced lower levels of challenge at work than full or part-time employees. When it came to feedback, all groups differed significantly from each other ($F=[13,261]=11.82, p<.001$). Contingent workers and men working part-time report the least feedback. There were also differences in both Quantitative Workload ($F=[13,261]=4.94, p<.01$), and Qualitative Workload ($F=[13,261]=4.38, p<.01$). There were differences between those working full-time and those working part-time, where the former report the most qualitative workload. In the table it is shown that there are significant group differences but that these do not show up in the post-hoc test. This is attributed to the fact that the number of respondents in one of the groups is too low to statistically confirm group differences at the .05 probability level.

Table 2. Mean values in work climate, and tests for direct effects of employment contract.

	Full-time 1	Part-time 2	Contingent 3	(F)	Post-hoc ^a
<u>Work Factors</u>					
Job Autonomy	3.64	4.16	3.33	2.86	
Job Challenge	3.63	3.63	2.33	13.38***	(1-3, 2-3)
Feedback	3.24	4.20	2.36	11.82***	(1-2, 1-3, 2-3)
Quant. Workload	3.21	2.38	2.50	4.94**	
Qual. Workload	2.27	1.59	1.90	4.38*	(1-2)
Role Conflict	2.48	2.03	2.28	1.36	
Role Ambiguity	2.50	1.88	2.43	1.94	
Control	2.82	3.71	2.30	5.72**	(1-2, 2-3)
Social Support	3.30	4.00	2.47	4.91**	(1-3, 2-3)
<u>Organizational Factors</u>					
Centralization	3.16	2.38	3.00	2.58	
Job Insecurity	2.56	2.50	3.20	2.83	
Gender Equality	3.46	3.66	3.68	0.38	
Justice	3.20	3.88	2.43	5.19**	(1-3, 2-3)

** $p < .01$, *** $p < .001$, $df = 2,276$.

^a=Scheffes post-hoc test for group differences.

Furthermore, there were significant differences in control ($F=[13,261]=5.72, p<.01$), where part-time employees differ from the rest. It is the part-time workers who experience the highest level of control in their work. The groups also differ on social support ($F=[13,261]=4.91, p<.01$), where, again, the part-time employees report the highest levels of social support. Finally, we find significant differences

in organizational justice ($F = [13,261] = 5.19, p < .01$), where part-time employees experience more organizational justice than the other groups of employees.

One more MANOVA was conducted in order to investigate whether health experiences differed between organizations and between men and women, and also if there were any interaction effect of organization and gender. No differences were found between the organizations (multivariate $F = [4,275] = 1.60, p > .05$). The MANOVA generated no significant overall effect of gender (multivariate $F = [4,275] = 0.67, p > .05$), nor was there any interaction effect (multivariate $F = [4,275] = 0.89, p > .05$).

A final MANOVA was run in order to test whether there were any differences in health between groups with different employment status. The MANOVA showed a significant main effect of employment type (Multivariate $F = [3,276] = 4.07, p < .01$). The post-hoc test for group differences (Sheffe) showed that the contingent workers reported more physical health complaints than full or part-time employees. Contingent workers also reported more mental health complaints than the other two groups. The full-time employees, however, report the highest experienced work-life imbalance.

Table 3. Results of multiple regression predicting job satisfaction, organizational commitment, and turnover intention.

Predictor	Job Satisfaction		Commitment		Turnover Intention	
	A	B	A	B	A	B
<u>Demographics</u>						
Gender ^a	-.07	.04	-.08	.10	.03	-.08
Age	-.01	.14	.14*	.18*	-.06	.08
<u>Work Factors</u>						
Job Autonomy	.17**	.21	-.01	.08	-.10	-.34*
Job Challenge	.25***	.25*	.16*	.23*	.01	-.06
Feedback	.04	-.05	.22**	-.20	-.21**	.01
Quant. Workload	.03	.05	-.02	.06	-.11	.03
Qual. Workload	.09	-.09	.10	-.14	-.05	-.01
Role Conflict	-.16**	-.17	.07	-.02	.15*	.22
Role Ambiguity	-.13*	-.08	.11	-.07	.08	.07
Control	.20***	-.07	.33***	.30**	-.07	.08
Social Support	.25***	.21*	.11	.05	-.05	-.05
<u>Organizational Factors</u>						
Centralization	.01	-.01	-.05	-.01	.11	.08
Job Insecurity	-.06	.01	-.08	-.12	.27***	.03
Gender Equality	.09	-.14	.06	.08	.02	.14
Justice	-.04	.22	.05	.27*	-.03	-.23
R ² (adjusted)	.72***	.52***	.48***	.56***	.54***	.42***

* $p < .05$, ** $p < .01$, *** $p < .001$.

^a 1=woman, 2=man

Three multiple regression analyses were performed to investigate which work and organizational variables were associated with attitude, performance, and health outcomes. The first analysis, presented in table 3, shows the prediction of attitudinal outcomes: job satisfaction, organizational commitment, and turnover intention. From the table, it is evident that job satisfaction, in organization A, is predicted by job autonomy, job challenge, role conflict, role ambiguity, control and social support. Job autonomy and job challenge exhibit a positive relation to job

satisfaction. That is to say, the more autonomy and challenge, the more satisfied employees are. Role conflict and role ambiguity, on the other hand, are negatively associated with job satisfaction, which implies that the lower the levels of role ambiguity and role conflict, the higher the job satisfaction. Finally, control and social support exhibit significant positive relations to job satisfaction, which we take as evidence that higher levels of control and social support contribute to more job satisfaction. Altogether, the model explains 72 percent of the variance in job satisfaction in organization A. In organization B however, the only two variables that influence job satisfaction are job challenge and social support. Both of these relations are positive and the model explains 52 percent of the variance in job satisfaction.

Regarding organizational commitment in organization A, there is a relation between age and this variable, in that older employees feel a greater commitment to the organization. Furthermore, we find that job challenge, feedback, and control exhibit significant positive relations to commitment. This implies that higher levels of control, challenge, and feedback are associated with more commitment to the organization. The model explains 48 percent of the variance in organizational commitment. In organization B there is a positive relation between age and organizational commitment as well. Other factors positively related to commitment are job challenge and control. Finally, organizational justice also affects organizational commitment in organization B. The relation is positive, being that the more organizational justice the employees report, the stronger the commitment.

In table 3, we also tested how work and organizational factors affect an individual's level of intention to voluntarily leave the organization— known as turnover intention. In organization A there is a negative relation between turnover intention and feedback, which implies that the less feedback the employee gets the greater her turnover intention. Role conflict and job insecurity affect the intention to leave the organization as well. These relations are positive, however, which implies that higher levels of role conflict and job insecurity predict a stronger turnover intention. Overall, the model explains 54 percent of the variance in turnover intention. In organization B, job autonomy is the only variable significantly related to turnover intention, and the model explains as much as 42 percent of the variance in turnover intention.

The results of the second regression analysis are presented in table 4. Here we investigated how work and organizational factors affect perceived performance and responsibility for work outcomes. Starting with organization A, we see that job challenge exhibits a significant positive relation to perceived performance. This may be interpreted as evidence that higher levels of job challenge are associated with higher levels of perceived performance. We further find that both the quantitative and qualitative measures of workload are related to perceived performance in organization A. It is interesting to note that the quantitative workload is positively related to perceived performance, whereas qualitative workload is negatively related. This implies that if a person has too much to do (quantitative workload) she will perceive her performance to be higher, but if the employee believes the work tasks exceed her ability, her perception will be she is

performing less. The model explains a total of 19 percent of perceived performance in organization A.

Table 4. Results of multiple regression predicting perceived performance and responsibility for work outcomes.

Predictor	Perceived Performance		Responsibility for Work Outcomes	
	A	B	A	B
<u>Demographics</u>				
Gender ^a	-.05	-.02	.02	-.06
Age	.03	-.01	-.01	.25*
<u>Work Factors</u>				
Job Autonomy	.07	.32*	.03	.41*
Job Challenge	.20*	.07	.17	-.17
Feedback	.07	.28*	.06	-.10
Quant. Workload	.24**	.21	.04	.15
Qual. Workload	-.19*	-.34**	-.11	-.09
Role Conflict	.03	-.13	.01	-.01
Role Ambiguity	-.13	.11	-.12	-.22
Control	.19	.07	.24*	-.10
Social Support	.14	.07	.01	-.12
<u>Organizational Factors</u>				
Centralization	.11	.24	-.04	-.02
Job Insecurity	.10	-.00	.19*	.08
Gender Equality	-.06	.12	.10	.07
Justice	-.09	-.20	-.09	.15
R ² (adjusted)	.19***	.24***	.10**	.17*

*p< .05, **p< .01, ***p< .001.

^a1=woman, 2=man

There are, to some extent, different factors that are significant in organization B. Job autonomy exhibits a positive relation with perceived performance– that is, those who experience job autonomy, to a greater extent, also perceive their performance to be higher. Feedback is also of significance for performance in organization B since those that get more feedback perceive their performance to be higher. Finally, qualitative workload exhibits a significant negative relation with the dependent variable. This implies that higher qualitative workload is associated with lower perceived performance. Examined altogether, the predictors explain 24 percent of the variance in perceived performance.

Table 4 also shows how work and organizational factors affect responsibility for work outcomes. In organization A, control is positively related to this dependent variable. This positive relation implies that the greater the feeling of control an employee believes she has, the greater the level of responsibility that is felt over the work results. Job insecurity also affects responsibility for work outcomes. The relation is positive which means that a high level of job insecurity is associated with more responsibility for work outcomes. The model explains 10 percent of the variance in responsibility for work outcomes. In organization B, age and job autonomy are related to responsibility for work outcomes. Both the relations are positive, which implies that with greater age and increased job autonomy, respectively, comes a greater feeling of responsibility for work outcomes. Altogether, the model explains 17 percent of the variance in responsibility for work outcomes.

Table 5. Results of multiple regression predicting work-life imbalance, mental-, and physical health.

Predictor	Work-life Imbalance		Mental Health Complaints		Phys. Health Complaints	
	A	B	A	B	A	B
<u>Demographics</u>						
Gender ^a	-.02	.06	-.15**	-.01	-.06	-.05
Age	.08	.06	.04	-.02	-.02	.01
<u>Work Factors</u>						
Job Autonomy	.15	.06	-.03	-.30*	-.14	-.42**
Job Challenge	.08	.10	-.07	-.13	-.09	-.03
Feedback	-.03	.06	-.12	-.10	-.08	-.07
Quant. Workload	.62***	.61***	.14*	.21*	.07	.25*
Qual. Workload	.08	.14	.14*	.25*	.07	.24
Role Conflict	.06	-.02	.00	-.00	.03	-.10
Role Ambiguity	-.08	-.08	.11	-.05	-.10	-.21
Control	-.02	-.01	-.07	-.11	.06	-.05
Social Support	-.10	-.10	-.15*	-.14	-.13	.00
<u>Organizational Factors</u>						
Centralization	.08	.20*	.03	-.15	.03	.03
Job Insecurity	-.04	.21*	.38***	.26*	.33***	.11
Gender Equality	-.00	-.00	.06	-.05	-.02	.07
Justice	-.12	.05	-.03	.07	-.01	.12
R ² (adjusted)	.50***	.54***	.54***	.50***	.26***	.18**

*p< .05, **p< .01, ***p< .001.

^a1=woman, 2=man

The third and final regression investigates which of the work and organizational factors affect our health indicators: work-life imbalance, and mental and physical health complaints (table 5). In organization A, only quantitative workload is significantly related to work-life imbalance. The relation is positive in that the more a person has to do at work the greater the work-life imbalance. Altogether, the predictor explains 50 percent of the variance in the dependent variable. In organization B, as well, there is a positive relation between quantitative workload and work-life imbalance. In this organization there is also a relation between centralization in decision-making and work-life imbalance. This relation is positive, implying that the more centrally decisions are made, the more work-life imbalance the employees report.

In addition to work-life imbalance we also studied whether there is a relation between the work and organizational factors and mental health complaints. In organization A, we find a relation between gender and this health indicator. The relation is negative which implies that women experience and report more mental health complaints than men. We also find positive relations between mental health and quantitative and qualitative workload, respectively. The relations imply that the higher quantitative or qualitative workload the employees experience, the more mental health complaints they report. Social support exhibits a negative relation to mental health complaints, which means that people who receive less social support report higher frequencies of mental health complaints. The last organizational factor related to the dependent variable under investigation in organization A, is job insecurity. The relation is positive; that is, the more job insecurity a person

experiences, the more mental health complaints she reports. The factors explain 54 percent of the variance in mental health complaints.

In organization B, four work and organizational factors are related to mental health complaints. Job autonomy exhibits a negative relation. This thus implies that the less job autonomy a person has, the more mental health complaints she reports. Both quantitative and qualitative workload exhibit positive relations to mental health complaints– the higher quantitative or qualitative workload, the more mental health complaints. Finally, job insecurity co-varies with mental health complaints. The relation is positive which means that those who experience a higher degree of job insecurity also report more mental health complaints. The model explains a total of 50 percent of the variance in mental health complaints.

In table 3 we also show the relations between work and organizational factors and physical health complaints. In organizational A, only job insecurity is related to physical health and the model explains 26 percent of the variance in physical health complaints. In organization B, there was a negative relation between job autonomy and physical health complaints, i.e. lower autonomy is associated with more physical health complaints. Quantitative workload is related to physical health complaints as well. This relation is positive, which means that the more one has to do, the higher frequency of physical health complaints one reports. Taken together, the predictors explain 18 percent of the variance in physical health complaints in organization B.

Results of the interview study

The overall objective of the interviews was to *supplement* the questionnaire study by a closer examination of the issue of performance and its relationship to salary. The intention has been to reflect those experiences, values, and fears that exist concerning the performance of the individual and the association of performance with pay. The interviews have also touched upon other areas such as the question of what constitutes a good outcome and how it can be assessed, as well as the very question of how people feel about being evaluated.

It is evident from the interviews that there are relatively large differences in pay systems within the companies. The most common system seems to be that the departments utilize a base-pay rate with a bonus system. This bonus is comprised of ten percent of the actual salary. Half of this ten percent is based on the personal development of the employee; the other half is based on the performance of the unit. The salary is thus divided in three sections: the base-pay, one variable part dependent on the performance of the department or unit, and one individual part based on to what extent the employee has achieved goals set up at an earlier time. It should be pointed out that not everyone is included in this pay system, and, in many cases, salary is not related to any form of performance at all.

Every supervisor negotiates with co-workers and evaluates their performance. It is the subjective judgement of the manager, however, that to a large degree determines the salary, and not objective criteria. In some cases, customer evaluations are used in order to assess customer satisfaction and these results may then be taken into account during salary negotiations. The criteria most often used

for evaluating the performance of the individual employee are: speed of work, responsibility, and competence (both formal and social). Social competence is considered very important in service organizations, mainly due to frequent customer interaction. The idea is that employees should know what criteria are used to evaluate them, and what the results are on each criterion. Some individuals are “braver” than others when it comes to giving both positive and negative feedback to the employees and in asking the manager for the reasons behind a particular assessment. This gives rise to variations in the quality of the salary talks, which in the long run may lead to different individuals having different opportunities to change their behavior, and thus their salary and future salary development. It should be pointed out, however, that it is vital that the salary talks are conducted on the individual level and that they are carried out by the closest supervisor who sets the salary level, since it is her responsibility to be up-to-date on the individual employees' development, both concerning their competence and salary issues.

The goals to be achieved, that serve as the basis for the variable part of the salary, are evaluated and revised every three months in conjunction with the supervisor in charge of salary levels. One problem in this context is supervisor turnover. It is experienced as being difficult to achieve continuity in a system that can bring about difficulties in following-up and assessing whether earlier goals have been obtained. Manager and employee set the goals in consultation with each other, and this frequently results in realistic goals that are acceptable to both parties. If the salary for one employee is set below the collective bargaining agreements, the union will check the employee's individual development plan and look at what goals have been set between the individual and her boss.

Difficulties have also been expressed concerning the method for determining salary level. The supervisors base their evaluations on either “idiosyncratic judgement” or on individual goal attainment which is often quantitative. They can, for example, be based on the number of tasks a person has completed during a given time period, or other similar quantitative measurements that are relatively easy to get statistical information about. The problem with this is that it does not give any information about the quality of the work. Built into the very system is an antagonism between quantity and quality. It is rather easy for the manager to get a hold of statistics, but more difficult to assess quality.

Yet another problem that emerges from the interviews has to do with the assessment of goal attainment by the different parties involved. It can happen that the supervisor and the employee have differing views on whether a goal has been attained, or to what measure a goal has been partially fulfilled. A second issue, in this context, is the geographical distance between the supervisor in charge of determining salary and the employee that sometimes exists, and that may result in the manager having little knowledge of the employee to be evaluated. There are hardly any problems concerning the clarity of the goals to be attained. Instead, there is a problem in the assessment of to what extent the individual has managed to achieve her goals, especially if they are qualitative rather than quantitative.

Since salary is individual and in most cases determined only by taking subjective criteria into account, individuals end up being ranked according to these criteria. This is perceived as a problem since it is difficult to know what others are doing and what they really should be doing. The fact that many people work on their own complicates matters further, “*you do your part and then the next person takes over*”. This implies that it will be difficult for the supervisor to rank the employees in the department when everyone carries out different tasks and has different skills.

The respondents also think negatively of the fact that pay levels are kept secret. They feel this unnecessarily creates an atmosphere of discontent and secrecy which affects the work climate adversely. In some departments the staff is aware of the median pay and can compare it to their own. It is generally thought that the gap between the highest and the lowest salaries becomes greater in a concealed pay system. The performance-based part of the salary is perceived as difficult to understand, haphazard, and unfair. Sometimes the bonus is awarded as one amount, and, at another time, it is a different amount, or no bonus is given at all. The general opinion of the salary system is that it is relatively good in theory, but irregular and dysfunctional in practice. The irregularity is primarily attributed to the frequent reorganizations in which changes do not have time to take effect before new ones are introduced.

The respondents do not express much discomfort over being evaluated. They reason that there has always been some sort of assessment of how they carry out their work even if the pay did not reflect this. The respondents believe that direct feedback on one's performance may be positive. If one is told what the performance expectations are, behavior can be more easily adapted accordingly. This requires, however, that the evaluations be conducted as dialogues with open communication. The feedback has to aim at strengthening and supporting the individual rather than at pointing out faults, and the employee has to have confidence in the person doing the evaluation.

The respondents expressed concern over the practical obstacles involved in objectively assessing the performance of individuals. They are, in part, doubtful over the possibility of setting up criteria that could adequately and objectively reflect reality and, to some extent, also unsure of whether it is possible to fairly assess an individual's performance. The respondents point out that supervisors could not possibly have adequate insight into everyday work at all times. Many employees work out at customer sites where there is no supervisor, which makes it difficult to fairly and objectively assess the interaction between the consultant and the customer.

In general, we have observed that employees, union representatives, and supervisors in charge of determining pay rate do not, in principal, have anything against the performance-based pay system. The staff-members express, however, some skepticism over the ability of the supervisors to conduct fair evaluations. Some even express they feel discomfort and unfamiliarity over having to personally argue for their salary. The main issue seems to be the perception of the criteria for the evaluation; if these are perceived as fair and relevant there is no opposition to differentiated salaries. However, a fear exists among the respondents

that the work climate and relations between co-workers may be affected negatively, especially if pay rate is kept secret, and the belief that great differences exist in pay becomes widespread in the organization. Even more problematical are the difficulties of linking pay directly to performance and identifying what performance entails. Most of the respondents seem to be of the opinion that good performance is that which generates revenue for the company, such as when a large order is secured amidst tough competition from other companies. It is more difficult to define performance on the local and individual level.

A willingness to explore other types of performance incentives, besides those related to salary, has been expressed— such as the options of longer vacation hours or shorter work hours. In conclusion, it can be noted that there did not seem to be any major problems with clarity regarding the work's character or content, or regarding the goals of the individual's work. The respondents do not express that their pay, to any greater extent, is related to performance. Those under the type of system where 10 percent is determined by bonus and individual goal attainment, express the opinion that this is satisfactory, and that they do not want a larger proportion of the pay to be dependent on bonus or individual goal achievement.

Discussion

Since the increasing rate of sick-leaves is often attributed to working life (RFV 2002:4; SOU 2002:5), it is important to investigate the influence of working life on the individual and her health. The purpose of the present study was to explore how employees in the modern working life perceive their work situation, and to examine how their experiences relate to work related attitudes, performance, and health. The qualitative section of the study provides a more in-depth inspection of the concept of performance and the relation between performance and pay. In the study we systematically compare employees in a private organization with employees in an organization in the public sector since earlier research indicates differences between these groups (Aronsson et al., 1999; Furåker, 2000; Kinnunen & Nätti, 1994).

There are no differences between the organizations with respect to the health variables; that is, the privately and publicly employed do not differ in physical or mental health, or work-life imbalance. There are, however, differences between the organizations regarding psychological climate. Employees of the private company experience higher workload on both workload indicators, i.e. having too much to do and having to complete too difficult tasks. Furthermore, the privately employed report more social support. This indicates some differences from the study by Furåker (2000), in which it was found that the relation between individuals at a private workplace did not differ from those at a public organization. Both men and women in the private organization report there is more equality between the sexes, which implies that the opinion of gender equality is lower among the publicly employed than the privately employed.

The results show an interaction effect of gender and organization. We see that men in the public organization feel that they have the most autonomy, whereas the opposite is true for the women in the same organization. In the public organization, we thus find both extremes: those with the most, and the least, autonomy. Furåker (2000) found that men, regardless of the type of organization, enjoy more independent jobs than women. The present study, however, shows no main effect of gender, but rather an interaction effect of organization and gender, where the combination of being a man and employed in the public organization gives the most autonomy, whereas the opposite is true for the combination of woman and public employee.

Furthermore, we see that men of the private organization experience the greatest amount of role conflict, while the women in the same organization report the least degree of role conflict. Sverke et al., (2000) also found that men report more conflicting role characteristics, but mainly in the case of role ambiguity. The men differ in the case of a stressor such as job insecurity as well. Men in the private organization felt the most job insecurity, while the men in the public organization felt the least amount of job insecurity. This result is contrary to earlier research which has shown that employees in public organizations are the ones most insecure over their employment (Furåker, 2000). Furåker (2000) accounts for these results by pointing to the recurrence of downsizing in the public sector. The private organization in the present study has undergone downsizing and, generally speaking, it can be said that businesses of the same type have met with a good deal of turbulence over the past few years. This could be seen as a possible explanation for the stronger feelings of job insecurity within the private company.

The results show no differences in health between the genders. The only difference we find between men and women is in their perceptions of psychological work climate, where men report a higher degree of equality than women. Thus, besides this exception, no differences exist.

Considering the fact that the proportion of temporary employees is on the rise in most industrialized countries, it is important to investigate how this group differs from permanent employees (Sverke et al. 2000). The results have to be interpreted with caution, however, given the small number of contingent workers in the sample. The results still show a significant main effect of employment contract regardless of organization. This indicates that there were overall differences in the study variables between full-time, part-time, and contingent workers. Sverke et al. (2000) find a significant main effect of employment in their study as well.

Beard and Edwards (1995) argue that it is in no way strange that contingent employees report higher levels of job insecurity than employees under other contracts since this type of employment, by definition, implies uncertainty. This reasoning also finds support in the study conducted by Sverke et al. (2000). The present study, however, found no differences in the levels of job insecurity between types of employment. This does not imply a lack of job insecurity, as the mean level of job insecurity in the public organization is 2.53, and 2.61 in the private organization, on a five-point scale. However, the results indicate that there are no differences in the experiencing of job insecurity, but that everyone experiences job

insecurity regardless of type of employment contract. The temporary employees report less job challenge as well as less feedback than the other of employees. Aronsson et al. (2000) found in their study that the people employed on need-based contracts rarely receive any training on the job, and generally have few opportunities for learning or development in the work. They also have fewer opportunities to influence organizational decisions. All in all, this leads to a greater risk for temporary employees to develop symptoms of ill-health. This group also reports the least perceived organizational justice. Control has, in several studies, been shown to be of great importance to health (Folkman, 1984; Peterson & Stunkard, 1989; Thompson, 1981). Social support has been shown to alleviate the negative effects (House, 1981). Organizational justice has also been shown to affect employee attitudes, performance, and especially well-being (Brockner, 1990; Novelli, Kirkman & Shapiro, 1995). Based on this it is not difficult to imagine that the temporary employees are more exposed to negative circumstances than other types of employees, which may lead to ill-health.

The results also explicitly show a significant main effect of employment status on health. It is the temporary employees who report the most complaints, both physical and mental. Research has indicated that temporary employees, due to their more vulnerable position (e.g. less influence on organizational decisions, fewer opportunities for training and development), run a greater risk of experiencing ill-health (Aronsson et al., 2000). Sverke et al. (2000), however, did not uncover any differences between temporary and permanent employees with regard to health. Given these inconsistent results it is difficult to determine which effects the various employment contracts have on the health of individuals. We do know that the perception of many aspects of the psychological climate is more negative among individuals with temporary contracts. Based on this, we fear there is a risk that temporary employees' health can be negatively affected, especially if the individual works under temporary contracts for a prolonged period.

Aronsson et al., (2000), in their research on the conditions for temporary employees, found that it would be beneficial to divide temporary employees into subgroups. This conclusion was made on the grounds that the temporary employees constituted such a heterogeneous group to begin with. The reason that such a categorization has not been used here is that this group contains too few individuals for any statistical differences to be detected. Nor have we separated the temporary employees according to gender for the same reason. Aronsson et al. (2000) goes on to discuss the issues of gender and equality and the problem of women being over-represented in those employment types which are most problematic, i.e. need-based employment and substitutes, and under-represented in the most favorable types of employment, i.e. project work. It is important to recall, in this context, that temporary employees still only constitute a small proportion of the labor force.

There is an indication that a large number of work factors are related to job satisfaction in the public organization. In the private organization, only job challenge and social support have an impact on job satisfaction. This result is somewhat remarkable, as job satisfaction is the variable which, in most studies, is related to the largest number of work climate factors (cf. Hackman & Lawler,

1971; Locke, 1976; Loher, Noe, Moeller & Fitzgerald, 1985). It seems that the degree of job challenge and social support are such strong indicators of job satisfaction that other factors lose their impact. The strong impact of these two factors is also supported by the fact that the model explains 52 percent of the variation in job satisfaction. In the public organization a substantial amount of variance in job satisfaction is explained by the work climate factors as well; here, additional factors contribute significantly to job satisfaction and these results can be said to agree with earlier results.

Furthermore, we establish that age is related to organizational commitment in both organizations. The relation indicates that older individuals report a higher degree of identification with and emotional attachment to the organization than do younger employees. These results are also in agreement with previous research which has established that individuals with longer tenure develop, over the years, stronger bonds to the organizations they work for (Mathieu & Zajac, 1990).

Job challenge is also positively related to commitment in both organizations. The relation is positive, implying that training and development (job challenge) is significant for the identification of the individual with the organization, and that a higher degree of development gives rise to a stronger emotional attachment to the organization. It should be pointed out that this result was found in both the public as well as the private organization, which implies that job challenge functions as a motivator independent of labor market sector. Control also affects the commitment of employees in both organizations. The relations are positive which implies that the higher the degree of control the employees perceive they have over their work, the more committed they are to the organization. The organizations differ only on two aspects in the prediction of organizational commitment. Feedback is positively related to organizational commitment in the public organization and, in the private company, organizational justice is also a predictor of organizational commitment.

It is vital for all organizations to retain their staff and lower the frequency of employee turnover. It has long since been established that a high turnover rate is associated with high costs in hiring new staff members and a loss of the organizational memory including historical information (e.g., Kets de Vries & Balazs, 1997; Mowday, 1981). Given these facts, it is naturally of interest to examine which factors of the work climate are associated with employee turnover intention. It is difficult and time consuming to collect data on actual turnover therefore, in research on work psychology, this turnover intention is often used as a proxy for actual behavior. There is also a meta-analysis which indicates a relation ($r=.50$) between the intention to quit and actual turnover (Steel & Ovalle, 1984).

The results of this investigation show that there are large differences between the organizations in regard to those factors that co-variate with turnover intention. In the private organization, it is autonomy that predicts the intention to quit; this relation is negative which implies that those who feel their job is characterized by a lower degree of autonomy are more prone to leave the organization in comparison with those who feel they have a higher degree of autonomy at work. This result is partially supported by Hellgren et al., (1997) study which showed that the effects of job perception on turnover intentions was indirect and affected by work

satisfaction. One of the strong predictors of job satisfaction was autonomy which, in turn, predicted turnover intention.

For the publicly employed, it is job insecurity, role conflict, and lack of feedback that stand in relation to the intention to quit work. The results, even here, correspond to what has been reported in earlier research, especially in regards to stressors such as role conflict and job insecurity which have consistently been found to be in relation to turnover likelihood (Bedeian & Armenakis, 1981; Sverke, Hellgren & Näswall, 2002). There is also earlier research that supports the theory that lack of autonomy and feedback has a relation to an individual's desire to leave her employment (Cotton & Tuttle, 1986; Hom, Katerberg & Hulin, 1979). That both organizations differ regarding factors relating to voluntary departure can be due to the fact that they operate within different sectors of the labor market, each with their own characteristics. This is most applicable to job insecurity— where there is the possibility for those working within a private company to feel they enjoy a higher degree of employability and therefore experience a lesser degree of job insecurity (see Sverke & Hellgren 2002 for a discussion). The reason why autonomy appears so important for the private company may have to do with the fact that many of their employees are consultants who enjoy a high degree of independence and self-responsibility, and, for these consultants, a sense of autonomy is important.

The work factor that displays a connection to performance, in both organizations, is qualitative workload; when employees have the impression that they have difficult work assignments, they feel they perform more. In the public organization, there is an effect of quantitative workload for perceived performance. It seems, therefore, that the complexity and the degree of difficulty in the work assignments themselves is connected to the perception of performance in both organizations. High levels of workload and time pressure even shape how performance is experienced in the public organization. Other work characteristics associated with personally assessed performance are feedback and autonomy, in the private organization, and job challenge, in the public. Where the regression analysis is inconclusive concerning the tendency of a connection, it is possible that individuals who perform a great deal also believe that they have a lot to do. There are also studies suggesting that work complexity is related to an individual's performance in that more complex work assignments lead to greater feelings of performance (e.g., Colarelli, Dean & Konstans, 1987; Day & Bedeian, 1991). Even Brown (1996) is of similar mind when he contends that individuals who experience a high workload are often also highly engaged in their work, which should eventually spread into and have an impact on the aspects of their behavior relevant to performance.

The positive relation between autonomy and perceived performance is supported by earlier research results (e.g., Eisenberger, Rhoades & Cameron, 1999). The authors make the argument that perceived autonomy and competence lead to greater intrinsic motivation. Intrinsic motivation has to do with feeling motivated because of internal rather than external factors such as external rewards— it is about taking pleasure in an activity for its own sake. Higher intrinsic task interest can, in

turn, lead to employees focusing a greater amount of their attention on tasks and, as a consequence of this, they will perform better (see also Eriksson, Sverke, Hellgren & Wallenberg, 2002).

The organizations also differ when it comes to those factors having to do with perceived responsibility for the work result. In the public organization, responsibility for the work result is predicted by control and job insecurity. The relationship is positive, which implies that the more control an employee believes she has over the work, the greater the feeling of responsibility for the work result. This is completely in accord with Cascio's (1995) view that performance appraisal, in order to be an affective tool in creating a link between performance and pay, requires that employees have a significant amount of control over the variables that affect their individual performances. We see, furthermore, that the more job insecurity employees in the public organization feel, the greater responsibility they feel for the work results. This indicates that individuals who experience job insecurity, to a greater degree than others, feel a personal responsibility for the work results. One explanation for this can be that those who feel their future employment threatened in some way work even harder than before in order to show that they are capable and worthy of being retained in the future. This therefore implies that a threat to employment can compel a greater sense of responsibility and better performance from an individual. This effect would seem to be short-sighted, however, when much indicates that individuals who experience job insecurity for an extended time, lose their motivation and report more frequent health ailments (for a discussion see Bergman & Wigblad, 1999; Hellgren & Sverke, 2001; Sverke & Hellgren, 2002). It is also important to point out that our results are based upon cross-sectional data and that the possible, negative, long-term consequences of job insecurity may not become evident. In the private organization, age and autonomy are positively related to responsibility for the work results. Autonomy is therefore important for employees in the private company when it comes to predicting both performance variables. This indicates that employees in the private company must feel that they personally can influence and have some control over their work situation in order to be performing well.

Regarding climactic factors and health, we have studied the connection between work-life imbalance and mental as well as physical health complaints. Few Swedish studies have investigated the impact modern working life has had on work-life imbalance. Lundberg (2000) found that women experience more role conflict related to the transitioning between work and family. This study, however, did not find any gender differences involving the work-life imbalance. Netemeyer et al. (1996) in their research on the work-family conflict, has been able to show a connection between work factors, such as role conflict, and role ambiguity. In the present study, we have examined the work-life imbalance which is a somewhat more general concept than the work-family conflict. One can imagine that the work-family conflict is one of a number of components of the work-life imbalance; a broader definition of the concept could also encompass a conflict between work demands and the rest of an individual's life within a number of different areas in addition to the family. We find, not entirely unexpectedly, that in both the public

and the private organizations, there is a connection between work-life imbalance and quantitative workload. In the public organization, it is only quantitative workload that shows a connection with work-life imbalance. In the private organization, however, there is also a connection between centralization in decision-making, job insecurity and work-life imbalance.

Netemeyer et al. (1996) contend that the work-family conflict co-variates with work-related stressors. Altogether, this indicates that individuals who perform better experience a high workload and, also, that the work adversely affects all the other areas of an individual's life. There seems to be an oppositional relationship between, for example, complex work tasks, a high degree of performance, and the negative encroachment, or transfer, of work onto one's private life. The fact that even job insecurity has a negative connection to private life indicates that experiencing a threat to employment affects an individual's entire living situation. This is also in agreement with what earlier research has indicated (e.g., Barling & MacEwen, 1992; Barling, Dupre & Hepburn, 1998). There are, however, only a few studies that have investigated the impact of job insecurity on an individual's total living situation, or on an employees closest relatives, so it is currently difficult to speak of this transfer effect, especially regarding long-term consequences.

The results show also that the degree of centralization in decision-making has an influence on an individual's experiencing of the work-family conflict (in the private organization). One explanation for this result could be that the centralization of decision-making is perceived, by the employees, as a loss of influence and control, especially if it has to do with factors that affect individuals' working conditions. Such a loss of control then appears to co-vary with an individual's experiencing of the conflict between work and private life. Today, there are a number of studies (see e.g. Cooper, 2000) that demonstrate the connection between degree of control and various stress and health variables, not least of all in connection with high demands (workload).

Problems with mental health can be accounted for by a few of our variables. In the public organization, we notice that women report more mental health problems than men. This result is completely in line with earlier research which shows that women are depressed, to a greater extent than men and, furthermore, tend to report more unpleasant effects than men (Diener, Suh, Lucas & Smith, 1999). In the private organization there is no effect for gender. Job insecurity, however, displays a positive relationship to mental health troubles in both organizations, which implies that those employees who reported that they felt insecure in their positions also have more mental health problems. This can be explained by the fact that job insecurity is a stressor and stress is often related to decreases in mental well-being (for an overview see Sverke et al., 2002). Two other work factors that can bring about stress are qualitative and quantitative workloads. The results show that both workload variables have a connection to problems with mental health in the public and the private organizations. In the public organization, the lack of autonomy leads to problems with mental health and, in the private organization, a loss of social support.

In the public organization, we also find a connection between job insecurity and physical health. The model explains 26 percent of the variations in physical health. Job insecurity, in a number of studies, has been shown to affect physical health (for an overview see Sverke et al. (2002). In the private organization, autonomy is in a relation to physical health. That autonomy is so very important for employees in private companies has been pointed out in nearly all of the analyses. Here, the model explains 18 percent of the variation in physical health problems.

The Interview Study

The main purpose of the interview study was to supplement the survey by taking a closer look at the concept of performance and the link between it and pay. Since the character of work has changed considerably, it has become more difficult for employers to supervise and evaluate an employee's work contribution (le Grand, 1996). According to le Grand (1996), this altered situation is rooted in the fact that working trends have become increasingly more qualified and independent in nature, and that work is often conducted in groups, which implies that it will be difficult to distinguish the performance of any single individual. This further implies that an individual's work contribution is not solely dependent on herself, but also tied in with the contributions of the other group members.

When the respondents are asked to define good performance, it is defined in terms that relate to the organizational or group levels, such as the filling of large orders, for example, or other such actions that serve to generate money for the company. It appears to be more difficult to clearly define what good performance is at the individual level le Grand (1996). le Grand further discusses the difficulties involved in measuring an individual's performance when the employees' work tasks are intertwined and therefore no longer dependent on a person's individual work contribution. At first sight, work contribution assessments can seem more suitable for measurement at the group or unit level. This is, however, still not without its problems. One of the problems that the author takes up concerns the so-called free-rider problem, which is when certain individual's gain mileage from the work of others without doing much themselves. This decreases the motivation of single individuals.

The vast majority of the respondents were positively disposed to pay being directly or indirectly connected to performance. This corroborates the studies carried out by Wallenberg (2000a, 2000b) which have shown that people are, in general, positively disposed to pay being linked with performance. The question that remains is how and by whom performance should be judged.

A problem that has been commented upon by the interviewees is that many employees work on-site with the customers which means that the supervisor in charge of pay rate can have quite a challenge assessing such a consultant's customer interaction in the field. Customer surveys are an option that can be used to get a sense of an employee's customer interaction skills, but even these can be misleading when factors outside the consultant's control color the evaluations.

Economics research has placed more emphasis on the study of the quantitative aspects of work contribution regarding the significance of the pay system for work performance (le Grand, 1996). An important question that arose in the interviews had to do with the difficulties over knowing what is to be measured in the assessment of performance. The respondents commented upon the antagonism existing between quantity and quality. It is relatively easy for the supervisor in charge of pay to procure quantitative information, such as the number of products sold or sales figures for a department over a certain period. An important piece of the puzzle is overlooked here: quality, which is probably most important for customer-oriented service agencies. According to Wallenberg (2000), good performance is that which contributes to the quality and fulfillment of organizational goals. When certain activities, which contribute to quality or goal attainment, do not happen to immediately bring in a profit for either the individual or the unit, it is essential that the more qualitative aspects of the performance are also taken into account in order to get an accurate picture.

The interviewees were somewhat sceptical over whether it was even possible to conduct objective assessments of individuals' performances. Hesitation was also expressed over whether it is possible, in an objective and adequate way, to reflect how it all comes together in reality. Wallenberg (2000) is of the opinion that objective and expertly formulated criteria for measuring performance is undesirable when they result in pay not being connected with the workplace, production, or the supervisor. Wallenberg also believes that it is desirable to have pay related to the circumstances unique to a certain workplace, and to a competent supervisor's ability to observe her employees. Based on the above line of reasoning, we can confirm that defining and measuring performance is a complicated undertaking. Since more and more companies decide against pay-for-performance systems, it becomes incredibly important to find a format. According to le Grand (1996) one requirement is that the criteria that are used be perceived as fair, well-grounded, and understood by the employees. If the criteria are not received as legitimate or clarity is lacking, the desired benefits of performance-based pay, such as increased effort and motivation, will not come about. Developing and evaluating new pay systems that better suit the modern working life is a difficult but important task for future research.

Concluding remarks

A significant limitation of this study is the cross-sectional nature of the data. In order to test for long-term effects, clearly longitudinal data is needed. A greater variety of methods is also required in order to avoid mono-method bias. It would, for example, be an advantage if self-reported measures of health could be supplemented with biological health measures. Even performance measures could be supplemented with directory information or assessments by people other than just the respondent. Another limitation is that the non-respondents could not be analyzed when no information about it is available.

The world of work has gone through and continues to go through dramatic changes. Technological development, world-wide competition, and the ever increasing demand of the customers are not likely to abate. We can instead expect that working life will be characterized by turbulence and unsurety in the years to come. The working conditions of the temporarily employed and its effects on the health and well-being is an area of immediate importance that insists on more research attention. Beard & Edwards, as early as 1995, pointed out how important it is to establish a consistent definition of contingent work, which is something still sought after. Another area of immediate interest concerns how the modern working life affects the work-life balance. Barely any Swedish research has been done in this area. Research on performance appraisal, performance-based pay systems and, not least of all, what impact this all has on individuals' health and well-being, are issues of the utmost importance in the modern working life.

References

- Ahlberg-Hultén, G. (1999). *Psychological demands and decision latitude within health care work. Relation to health and significance*. Doctoral dissertation. Department of Psychology, Stockholm University.
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs: Prentice-Hall.
- 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.
- Allport, G.W. (1935). Attitudes. In C. Murchison (Ed.), *A handbook of social psychology* (pp. 798-844). Worcester, MA: Clark University press.
- 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 fränkopplad: 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*. Rapport 2: 1986, Yrkesmedicinska kliniken, Örebro.
- Aronsson, G. & Göransson, S. (1997). Mellan tids- och resultatkontraktet. *Arbetsmarknad & Arbetsliv*, 3, 85-95.
- Aronsson, G., & Svensson, L. (1997). *Nedvarvning, återhämtning och hälsa bland lärare i grund- och gymnasieskolan*. Arbete och hälsa, 1997:21. Stockholm: Arbetslivsinstitutet.
- Aronsson, G., & Göransson, S. (1998). *Tillfälligt anställda och arbetsmiljödialogen. En empirisk studie*. Arbete och hälsa, 1998:3, Stockholm: Arbetslivsinstitutet.
- Aronsson, G., Bejerot, E., & Härenstam, A. (1999). Healthy Work: Ideal and Reality among Public and Private Employed Academics in Sweden. *Public Personnel Management*, 28, pp 197-215.
- Aronsson, G., Gustafsson, K., & Dallner, M. (2000). *Anställningsformer, arbetsmiljö och hälsa i ett centrum-periferiperspektiv*. Arbete och hälsa, 2000:9. Stockholm: Arbetslivsinstitutet.
- Ashford, S., Lee, C., & Bobko, P. (1989). Content, causes and consequences of job insecurity: A theory-based measure and substantive test. *Academy of Management Journal*, 32, 803-829.
- Bakan, D. (1969). *On method: Toward a reconstruction of psychological investigation*. San Francisco: Jossey-Bass.
- Barling J., Dupre, K. E., & Hepburn, C. G. (1998). Effects of parents' job insecurity on children's work beliefs and attitudes. *Journal of Applied Psychology*, 1, 112-118.
- Barling, J., & Kelloway, E. K. (1996). Job insecurity and health: The moderating role of work place control. *Stress Medicine*, 12, 253-259.
- Barling, J., & MacEwen, K. E. (1992). Linking work experiences to facets of marital functioning. *Journal of Organizational Behavior*, 13, 573-583.

- Beard, K. M., & Edwards, J. R. (1995). Employees at Risk: Contingent Work and the Psychological Experience of Contingent Workers. *Trends in Organizational Behavior*, 2, 109-126.
- Bedeian, A. G., & Armenakis, A. A. (1981). A path-analytic study of the consequences of role conflict and ambiguity. *Academy of Management Journal*, 2, 417-424.
- 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.
- Bergman, P., & Wigblad, R. (1999). Workers' last performance: why some factories show their best result during countdown. *Economic and Industrial Democracy*, 20, 343-368.
- Brayfield, A. H., & Rothe, H. F. (1951). An index of job satisfaction. *Journal of Applied Psychology*, 35, 307-311.
- Brockner, J. (1990). Scope of Justice in the Workplace: How Survivors React to Co-Worker Layoffs. *Journal of Social Issues*, 46, 95-106.
- Brown, S. P. (1996). A meta-analysis and review of organizational research on job involvement. *Psychological Bulletin*, 120, 235-255.
- Brown, S. P., & Leigh, T. W. (1996). A new look at psychological climate and its relationship to job involvement, effort, and performance. *Journal of Applied Psychology*, 81, 358-368.
- Burchell, B. J., Day, D., Hudson, M., Ladipo, D., Mankelow, R., Nolan, J.P., Reed, H., Wichert, I. C., & Wilkinson, F. (1999). *Job insecurity and work intensification. Flexibility and the changing boundaries of work*. York Publishing Services Ltd.
- Camman, C., Fishman, M., Jenkins, D., & Klesh, J. (1979). *The Michigan Organizational Assessment Questionnaire*. University of Michigan, Unpublished manuscript. Ann Arbor, Michigan.
- 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.
- Carlsson, L., & Wallenberg, J. (1999). *Lön-motivation.arbetsresultat: En vetenskaplig undersökning av sambanden*. Svenska kommunförbundet och Arbetslivsinstitutet.
- Cascio, W. F. (1995). Whither Industrial and Organizational Psychology in a Changing World of Work? *American Psychologist*, 50, 928-939.
- Cassell, C., & Symon, G. (1994). *Qualitative methods in organizational research: A practical guide*. London: Sage.
- Colarelli, S. M., Dean, R. A., & Konstans, C. (1987). Comparative effects of personal and situational influences on job outcomes of new professionals. *Journal of Applied Psychology*, 72, 558-566.
- Cook, J., & Wall, T. D. (1980). New work attitude measures of trust, organizational commitment and personal need non-fulfilment. *Journal of Occupational Psychology*, 53, 39-52.
- Cooper, C. L. (2000). *Theories of organizational stress*. Oxford: University Press.
- Cotton, J. L., & Tuttle, J. M. (1986). Employee Turnover: A Meta-Analysis and Review with Implications for Research. *Academy of Management Review*, 11, 55-70.
- Cox, T. Stress (1978). London: The Macmillan Press Ltd.
- Cranfield Network (1996). *Working time and contract flexibility in the E.U.* Cranfield University, School of management.

- Dale, A., & Bamford, C. (1988). Temporary workers: Cause for concern or complacency? *Work, Employment and Society*, 2, 191-209.
- Day, D. V., & Bedeian, A. G. (1991). Predicting job performance across organizations: The interaction of work orientation and psychological climate. *Journal of Management*, 17, 589-600.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 2, 276-302.
- Eisenberger, R., Rhoades, L., & Cameron, J. (1999). Does Pay for Performance Increase or Decrease Perceived Self-Determination and Intrinsic Motivation? *Journal of Personality and Social Psychology*, 77, 1026-1040.
- Eriksson, A., Sverke, M., Hellgren, J., & Wallenberg, J. (2002). Lön som styrmedel: Konsekvenser för kommunanställdas attityder och prestation. *Arbetsmarknad & Arbetsliv*, 3, 5-17.
- Folkman, S. (1984). Personal control and stress and coping processes: a theoretical analysis. *Journal of personality and Social psychology*, 46, 839-852.
- Fransson-Hall, C., Byström, S., & Kilbom, Å. (1995). Self-reported physical exposure and musculoskeletal symptoms of the forearm-hand among automobile assembly-line workers. *Journal of Occupational and Environmental Medicine* 37, 1136-1144.
- Furåker, B. (1995). Tjänstesamhälle eller postindustriellt samhälle- några begrepp och teoretiska perspektiv. In: Svensson, L.G. & Orban, P. (red.), *Människan i tjänstesamhället* (sid 24-56). Studentlitteratur.
- Furåker, B. (2000). Offentligt och privat anställdas upplevelser av sitt arbete. *Arbetsmarknad & Arbetsliv*, 6, 33-47.
- Goldberg, D. (1972). *The detection of psychiatric illness by questionnaire*. London: Oxford University Press.
- Guest, D. E., & Dewe, P. (1991). Company or trade union: Which wins workers allegiance? A study of commitment in UK electronic industry. *British Journal of Industrial Relations*, 29, 75-96.
- Hackman, J. R., & Lawler, E. E. (1971). Employee reactions to job characteristics. *Journal of Applied Psychology*, 55, 259-286.
- 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.
- Hall, E. M. (1990). *Women's Work: An Inquiry into the Health Effects of Invisible and Visible Labor*. Doktorsavhandling. Karolinska institutet, Stockholm.
- Hedge, J. W., & Borman, W. C. (1995). Changing Conceptions and Practices in Performance Appraisal. In: Howard A.. (Ed.), *The Changing Nature of Work*, (pp. 451-482). San Fransisco: Josey-Bass Publishers.
- Hellgren & Sverke (2001). Unionized Employees' Perception of Role Stress and Fairness during Organizational Downsizing: Consequences for Job Satisfaction, Union Satisfaction and Well-being. *Economic and Industrial Democracy*, 22, 543-567.
- Hellgren, J., Sjöberg, A., & Sverke, M. (1997). Intention to quit: Effects of job satisfaction and job perceptions. In F. Avallone, J. Arnold, and 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.
- Hom, P. W., Katerberg, R. J., & Hulin, C. L. (1979). Comparative examination of three approaches to the prediction of turnover. *Journal of Applied Psychology*, 64, 280-290.
- House, J. (1981). *Work stress and social support*. Reading, MA. Addison-Wesley Publishing Company.
- Hovmark, S., & Thomsson, H. (1995). *ASK- ett frågeformulär för att mäta arbetsbelastning, socialt stöd, kontroll och kompetens i arbetslivet*. Rapport från psykologiska institutionen, Stockholms universitet, rapport 86:1995.
- Howard, A. (1995). *The changing nature of work*. San Francisco, CA: Jossey-Bass.
- Isaksson, K., & Johansson, G. (1997). *Avtalspension med vinst och förlust*. Stockholm: Folksam.
- Jackofsky, E. F., & Slocum, J. W. Jr. (1988). A longitudinal study of climates. *Journal of organizational behavior*, 9, 319-334.
- James, L. A., & James, L. R. (1989). Integrating work environment perceptions: Explorations into the measurement of meaning. *Journal of Applied Psychology*, 74, 739-751.
- James, L. R., & Jones, A. P. (1974). Organizational climate: A review of theory and research. *Psychological Bulletin*, 81, 1096-1112.
- James, L. R., & Sells, S. B. (1981). Psychological climate: Theoretical perspectives and empirical research. In: Magnusson D. (Ed.), *Toward a psychology of situations: An interactional perspective* (pp. 275-295). Hillsdale, NJ: Lawrence Erlbaum.
- James, L. R., Hater, J. J., Gent, M. J., & Bruni, J. R. (1978). Psychological climate: Implications from cognitive social learning theory and interactional psychology. *Personnel Psychology*, 31, 783-813.
- Johansson, G. (1991). Stress i arbetslivet. In: Lennerlöf L. (red.), *Människan i arbetslivet* (sid 122-139). Allmänna Förlaget.
- Karlsson, G. (1993). *Psychological qualitative research from a phenomenological perspective*. Stockholm: Almqvist & Wiksell.
- Kets de Vries, M. F. R., & Balazs, K. (1997). The downside of downsizing. *Human Relations*, 50, 11-50.
- Kinnunen, U., & Nätti, J. (1994). Job insecurity in Finland: Antecedents and consequences. *The European work and organizational psychologist*, 4, 297-321.
- Lazarus, R. S. & Folkman, S. (1984) *Stress, Appraisal, and Coping*. New York: Springer Publishing Company.
- Lazarus, R. S. (1971) The concept of stress an disease. In Levi L. (Ed.), *Society, Stress, and Disease: The Psychosocial Environment and Psychosomatic Disease* (Vol 1) (pp. 53-58). London: Oxford University Press.
- le Grand (1996). *Lön för mödan? Arbetsmotivation och nya löneformer*. Work-Organization- Economy Working Paper Series (No 35). Sociologiska institutionen, Stockholms universtitet.
- Lidwall, U., & Skogman Thoursie, P. (2000). Sjukskrivningar och förtidspensionering under de senaste decennierna. In Marklund S. (red.), *Arbetsliv och hälsa 2000* (sid 91-124). Stockholm: Arbetslivsinstitutet.
- Locke, E. A. (1976). The nature and causes of job satisfaction. In: Dunnette M. (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297-1349). Chicago: Rand McNally.

- Loher, B. T., Noe, R. A., Moeller, N. L., & Fitzgerald, M. P. (1985). A meta-analysis of the relation of job characteristics to job satisfaction. *Journal of Applied Psychology*, 70, 280-289.
- Lundberg, I. (2000). Arbetsmarknad, arbetsliv och psykisk ohälsa. In: Marklund S. (red.), *Arbetsliv och hälsa 2000* (sid 303-322). Stockholm: Arbetslivsinstitutet.
- Lundberg, O., & Gonäs, L. (1998). Trends in Women's Psychosocial Work Environment and Health, and Structural Changes on the Labor Market. In: Orth-Gomér K., Chesney M.A. and Wenger, N.K. (Eds.), *Women, Stress and Heart Disease* (pp. 57-72).
- Lyons, T. F. (1971). Role clarity, need for clarity, satisfaction, tension, and withdrawal. *Organizational Behavior and Human Performance*, 6, 99-110.
- Mathieu, J. E., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin*, 2, 171-194.
- Mellor, S., Mathieu, 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.
- Miles, M. B. & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage.
- Miles, M. B., & Huberman, M. A. (1994). *Qualitative Data Analysis* (2nd ed.). SAGE Publications.
- Mowday, R. (1981). Viewing turnover from the perspective of those who remain: The influence of attitudes on attributions of the causes of turnover. *Journal of Applied Psychology*, 66, 120-123.
- Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior*, 14, 224-247.
- Netemeyer, R. G., McMurrian, R., & Boles, J. S. (1996). Development and Validation of Work-Family Conflict and Family-Work Conflict Scales. *Journal of Applied Psychology*, 81, 400-410.
- Novelli, L, Jr; Kirkman, B. L., & Shapiro, D. L. (1995). Effective Implementation of Organizational Change: An Organizational Justice Perspective. In Cooper C.L. and Rousseau D.M. (Eds.) *Trends in Organizational Behaviour*, Volume 2. John Wiley & Sons Ltd.
- Nunnally, J. C. (1978). *Psychometric theory*. New York: McGraw-Hill.
- Patton, M. Q. (1987). *How to use qualitative methods in evaluation*. Newbury Park, CA: Sage.
- Peterson, C., & Stunkard, A.J. (1989) Personal control and health promotion. *Social Science and Medicine*, 8, 819-828.
- Pfeffer, J. (1994). *Competitive advantage through people: Unleashing the power of the workforce*. Boston: Harvard Business School Press.
- Pfeffer, J., & Baron, N. (1988) Taking the work back out: Recent trends in the structures of employment. *Research in Organizational Behaviour*, 10, 257-303.
- Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970) Role conflict and ambiguity in complex organizations. *Administrative Sciences Quarterly*, 15, 150-163.
- Rosenberg, M. J., & Hovland, C. I. (1960) *Attitude organization and change*. New Haven: Yale University.
- Sjöberg, A. & Sverke, M. (1996). Predicting turnover intention among nurses: The role of work values. In Baba V.V. (Ed.), *Work values and behaviour: Research and*

- applications* (pp. 213-223). Montréal: International Society for the Study of Work and Organizational Values.
- 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: Fritzes.
- Sparrow, P.R., & Marchington, M. (1998). Is HRM in crisis? In: P.R. Sparrow and M. Marchington (Eds.), *Human resource management: The new agenda*. Pitman, London.
- Statistics Sweden (1997). *Statistisk årsbok 1997*, Vol 83. Stockholm: SCB.
- Steel, R.P., & Ovalle, N.K. (1984). A review and meta-analysis of research on the relationship between behavioral intention and employee turnover. *Journal of Applied Psychology*, 69, 673-686.
- Steyaert, C. & Bouwen, R. (1994). Group methods of organizational analysis. In C. Cassell and G. Symon (Eds.) *Qualitative methods in organizational research: A practical guide*. London: Sage.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage.
- Sverke, M., Gallagher, D.G., & Hellgren, J. (2000) Alternative Work Arrangement: Job Stress, Well-being and Work Attitudes among Employees with Different Employment Contracts. In: Isaksson K., Hogstedt C., Eriksson C., & Theorell T. (Eds.), *Health Effects of the New Labour Market* (pp. 145-168). New York: Kluwer Academic/Plenum Publishers.
- Sverke, M., & Hellgren, J. (1998). *Enkät kompendium: Arbetsmiljö och engagemang i vården*. Psykologiska institutionen, Stockholms universitet.
- Sverke, M., & Hellgren, J. (2002). The Nature of Job Insecurity: Understanding Employment Uncertainty on the Brink of a New Millenium. *Applied Psychology: An International Review*, 51, 23-42.
- Sverke, M., Hellgren, J., & Näswall, K. (2002). No security: A meta analysis and review of job insecurity and its consequences. *Journal of Occupational Health Psychology*, 7, 242-264.
- Sverke, M., Hellgren, J., & Öhrming, J. (1997). *Hospital corporatization: How are nurses' job perceptions and work-related attitudes affected?*. Reports from the Department of Psychology, Stockholm University, 1997, No. 839.
- Sverke, M., Hellgren, J., & Öhrming, J. (1999). Organizational restructuring and health care work: A quasi.experimental study. In le Blanc P.M., Peeters M.C.M., Büssing A., and Schaufeli W. B. (Eds.), *Organizational psychology and health care: European contributions* (pp.15-32). München: Rainer Hampp Verlag.
- 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.
- The National Social Insurance Board, RFV 2002:4. *Långtidssjukskrivningar för psykisk sjukdom och utbrändhet: Vilka egenskaper och förhållanden är utmärkande för de drabbade?* Stockholm: Riksförsäkringsverket.
- Thompson, S.C. (1981). Will it hurt less if I can control it? A complex answer to a simple question. *Psychological Bulletin*, 1, 89-101.
- Wallenberg, J. (2000). *Lön: Mål eller medel?*. Landstingsförbundet.
- Walsh, J. T., Taber, T. D., & Beehr, T. A. (1980). An integrated model of perceived job characteristics. *Organizational Behavior and Human Performance*, 25, 252-267.

- Wikman, A. (2000). Arbetsmarknadens utveckling i Sverige. I S. Marklund (red.), *Arbetsliv och hälsa 2000* (sid 27-42). Stockholm: Arbetslivsinstitutet.
- Wikman, A. *Internationalisering, flexibilitet och förändrade företagsformer. En statistisk analys av arbetsställets utveckling under 90-talet*. Arbetsliv i omvandling 2001:8, Stockholm: Arbetslivsinstitutet.

Appendix

Descriptive Statistics and Correlations for the Study Variables for organization A.

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21		
1 Gender ^a	1.0																						
2 Age	.17	1.0																					
3 Job Autonomy	.16	.12	1.0																				
4 Job Challenge	.15	.04	.46	1.0																			
5 Feedback	-.04	.13	.55	.42	1.0																		
6 Quant. Workload	.06	-.04	-.07	.34	.10	1.0																	
7 Qual. Workload	.09	-.02	-.04	.27	-.03	.50	1.0																
8 Role Conflict	-.05	-.11	-.37	.01	-.28	.27	.36	1.0															
9 Role Ambiguity	.07	-.16	-.55	-.24	-.55	.09	.15	.44	1.0														
10 Control	.12	.13	.65	.35	.55	-.02	-.07	-.21	-.41	1.0													
11 Social Support	.08	.02	.52	.36	.48	-.06	-.12	-.30	-.47	.48	1.0												
12 Centralization	-.06	.01	-.48	-.22	-.43	.11	.08	.34	.38	-.46	-.52	1.0											
13 Job Insecurity	-.14	-.05	-.51	-.44	-.44	-.20	-.01	.23	.29	-.55	-.36	.35	1.0										
14 Gender Equality	.32	.01	.34	.13	.17	.01	-.11	-.40	-.29	.33	.29	-.39	-.31	1.0									
15 Justice	.07	.03	.50	.27	.57	-.01	-.04	-.47	-.49	.54	.49	-.54	-.49	.49	1.0								
16 Job Satisfaction	.08	.08	.71	.57	.59	.09	.03	-.38	-.58	.64	.65	-.48	-.54	.38	.56	1.0							
17 Commitment	.06	.18	.48	.46	.55	.12	.11	-.11	-.30	.61	.43	-.38	-.47	.23	.45	.65	1.0						
18 Turnover Intention	-.05	-.14	-.56	-.38	-.60	-.14	-.01	.37	.49	-.54	-.46	.46	.59	-.29	-.55	-.73	-.52	1.0					
19 Performance	.03	.07	.27	.33	.31	.19	-.04	-.03	-.27	.29	.27	-.08	-.18	.02	.13	.41	.38	-.23	1.0				
20 Responsibility	.06	.05	.28	.23	.26	-.01	-.08	-.12	-.27	.31	.24	-.21	-.11	.19	.18	.27	.33	-.16	.44	1.0			
21 Psy. Health Complaints	-.18	-.06	-.55	-.35	-.51	.11	.21	.33	.44	-.54	-.52	.43	.60	-.28	-.49	-.60	-.44	.49	-.34	-.21	1.0		
22 Phys Health Complaints	-.16	-.07	-.42	-.31	-.34	.02	.10	.23	.22	-.36	-.36	.31	.48	-.24	-.34	-.42	-.28	.43	-.12	-.04	-.71	1.0	
23 Work-life Imbalance	.03	.07	-.04	.28	.01	.68	.43	.30	.06	-.07	-.16	.21	-.05	-.10	-.16	-.00	.05	.01	.15	.01	.29	-.29	1.0
Mean	1.47	48.28	3.64	3.54	3.16	3.05	2.12	2.42	2.51	2.81	3.11	3.18	2.55	3.33	3.10	3.47	2.66	2.42	4.31	4.04	4.04	1.92	1.92
Standard Deviation	.50	10.46	.76	.88	.88	1.07	.75	.85	.95	.95	1.13	1.02	.90	1.10	1.03	1.05	1.00	1.20	.50	.60	.60	.51	.51
Reliability (alpha)			.82	.74	.80	.85	.68	.79	.83	.79	.83	.72	.81	.86	.91	.90	.85	.83	.79	.59	.59	.88	.88

n=183. Correlations over .14 p<.05.

^a1=woman, 2=man

Descriptive Statistics and Correlations for the Study Variables for organization B.

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21			
1 Gender ^a	1.0																							
2 Age	.04	1.0																						
3 Job Autonomy	-.11	.16	1.0																					
4 Job Challenge	-.03	-.03	.41	1.0																				
5 Feedback	-.08	.18	.41	.32	1.0																			
6 Quant. Workload	-.04	-.07	-.03	.56	-.07	1.0																		
7 Qual. Workload	-.08	-.04	-.20	.19	-.13	.43	1.0																	
8 Role Conflict	.30	-.14	-.34	.01	-.34	.38	.43	1.0																
9 Role Ambiguity	-.08	-.16	-.56	-.23	-.57	.20	.37	.46	1.0															
10 Control	.01	.07	.63	.38	.41	.17	-.02	-.26	-.43	1.0														
11 Social Support	-.08	.20	.51	.42	.43	.06	.01	-.24	-.33	.49	1.0													
12 Centrality	-.03	.02	-.41	-.19	-.44	.13	.06	.26	.45	-.47	-.43	1.0												
13 Job Insecurity	.19	-.01	-.50	-.15	-.38	.11	.33	.41	.37	-.30	-.27	.35	1.0											
14 Gender Equality	.25	-.05	.04	.17	.17	-.13	-.02	.01	-.17	.09	.09	.17	.17	1.0										
15 Justice	-.09	.05	.45	.31	.61	-.07	-.18	-.39	-.51	.55	.51	-.49	-.46	.16	1.0									
16 Job Satisfaction	-.10	.25	.60	.45	.43	.01	-.20	-.41	-.49	.46	.58	-.36	-.40	-.03	.54	1.0								
17 Commitment	.09	.21	.58	.45	.37	.07	-.20	-.28	-.48	.64	.49	-.38	-.38	.17	.58	.65	1.0							
18 Turnover Intention	.07	-.20	-.59	-.25	-.42	.14	.24	.47	.51	-.42	-.43	.41	.45	.05	-.52	-.70	-.57	1.0						
19 Performance	-.7	.10	.40	.24	.29	.08	-.30	-.24	-.24	.26	.22	.02	-.23	.10	.15	.46	.39	-.20	1.0					
20 Responsibility	-.04	.30	.40	.01	.19	-.05	-.22	-.22	-.39	.21	.14	-.15	-.18	.06	.23	.28	.29	-.18	.41	1.0				
21 Psy. Health Complaints	.06	-.13	-.61	-.25	-.40	.26	.44	.40	.44	-.39	-.40	.24	.54	-.08	-.40	-.58	-.52	.46	-.52	-.41	1.0			
22 Phys Health Complaints	-.01	-.05	-.40	-.03	-.13	.28	.34	.17	.17	-.18	-.14	.16	.31	.05	-.11	-.19	-.22	.23	-.04	-.18	.55	1.0		
23 Work-life Imbalance	.05	.04	-.09	.30	.07	.71	.42	.34	.15	.05	-.05	.27	.30	-.01	-.13	-.17	-.05	.23	-.06	.02	.41	.41	1.0	
Mean	1.69	46.33	3.61	3.68	3.36	3.41	2.47	2.59	2.46	2.89	3.67	3.04	2.67	3.70	3.33	3.60	2.95	2.10	4.25	4.06	1.84	1.84	1.84	
Standard Deviation	.46	10.27	.70	.66	.72	.89	.67	.84	.78	.82	.83	.92	.74	.67	.83	.92	.83	.83	1.08	.44	.62	.43	.43	.43
Reliability (alpha)			.77	.67	.77	.83	.61	.82	.76	.79	.80	.76	.80	.75	.90	.91	.85	.87	.76	.63	.63	.87	.87	.87

n=91. Correlations over .20 p<.05.

^a1=woman, 2=man