Work pressure
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Results of a conceptual and empirical analysis

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Work pressure. Results of a conceptual and empirical analysis

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This paper presents a conceptual and empirical analysis of the notion of 'work pressure'. This notion is frequently used in current debates on working conditions, but lacks conceptual and operational precision. A conceptual model based on action regulation theory, state regulation theory, and stress theory is used to differentiate work pressure from related concepts, such as work demands, work load and work stress. Work pressure is conceived as a subjectively experienced state of tension associated with the (current and/or anticipated) execution of work tasks.

Using items from several published measurement instruments a set of scales was developed for measuring nine work demands, workload, and work pressure. Next, these scales were used in an analysis of structural relationships, together with scales pertaining to non-work factors as well as to fatigue and stress, using LISREL-8. The analyses are based on a cross-sectional sample of Dutch workers (N = 1129).

It is demonstrated that the various concepts can be reliably measured and that their interrelationships conform to the conceptual model. A comparison of subgroups of workers, based on cluster analysis, shows that high levels of work pressure can derive from different patterns of work demands. It is also shown that high work load does not necessarily lead to high work pressure, and that high work pressure does not necessarily produce stress. Implications for the effective prevention and management of work pressure are discussed.

Introduction

In current debates about the working conditions in Europe frequent references are made to the notion of 'work pressure'. In popular publications and reports from work hygiene institutions and labour unions concern is expressed about
the prevalence of high work pressure among a great part of the working population. In our own country, the Netherlands, alarming figures have been published, showing that 30 to 60% of workers suffer from high pressure at work (Smulders & Bloemhoff, 1991; Diekstra et al., 1992; Vroom, 1995; Werkduik in Nederland, 1997). For instance, Diekstra et al. have shown that 35% of all respondents report problems with work pressure, 10% describe these problems as serious and speak of "excessive work demands". According to another study the percentage of employed people complaining about high time pressure at work has grown to 60% in 1996 (CBS, 1997). In the public debate about the issue it is often asserted that high work pressure is a result of ongoing reductions of the work force, greater intensity of work due to high demands on speed and quality, and the greater use of computer technology at work. There is a fear that high work pressure will lead to greater work stress and rising work disability, and will bring social and economic disadvantages in the long run. Several studies suggest that work pressure is indeed a factor negatively affecting worker health and well-being (e.g. Carayon & Zijlstra, in press; Frone, Russell & Cooper, 1995; Carayon, Yang & Lee, 1995; Turnipseed, 1994; Neubauer, 1992; Smith et al., 1992; Rees & Cooper, 1992; Jones, Fletcher & Ibbetson, 1991; Siegrist et al., 1990).

However, the notion of work pressure does not carry a very precise meaning, and there is as yet little agreement about the way in which it should be operationalised. In this paper we will present a conceptual model, that may help to distinguish work pressure from similar concepts and to define it in a unequivocal way. We will also describe the construction of a method for measuring work pressure and related concepts, the so-called 'Tilburg Work Pressure Questionnaire', and present some empirical findings on the phenomenon of work pressure, based on a study carried out in the Netherlands in 1998 (see also van Helvoort et al., 1998).

The research project reported upon here was carried out by a research team consisting of R.A. Roe, F.R.H. Zijlstra, A. Vingerhoets, J. de Vries, M. van der Mast, M. Meegens & S. van Helvoort at Tilburg University. The project was co-funded by the Magazine 'Psychologie' and the Research School 'Psychology and Health'.

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Aim

The aim of the study is multi-fold, i.e.: (1) to clarify the conceptual status of work pressure, (2) to develop a set of instruments for the measurement of work pressure, (3) to investigate the situational and personal determinants of work pressure, and (4) to explore the consequences of work pressure for people's well-being and health. The approach taken is primarily work psychological, that is, the focus is on intra-individual factors and processes involved in the execution of work tasks. The study reported here, is part of a wider research programme on work pressure, which comprises three main parts: a survey study carried out in a broad cross-sectional sample of people doing paid work, an in-depth interview study, aiming at revealing people's subjective experiences associated with work pressure, and an experimental study of the dynamics of work pressure on a longer and shorter time axis. Here we focus on results from the survey study, but we will use some findings from the interview study in the discussion.

Conceptual issues

If one examines the relevant research literature it appears that there exists considerable conceptual confusion with regard to notions such as work demands, work load, time pressure, job pressure, and work pressure. Often two or more of these terms are used interchangeably (e.g. Brookings, Wilson & Swain, 1996; Urban, Weaver & Bowers, 1996; Veltman & Gaillard, 1993; Tsang & Velasquez, 1995; Laudeman & Palmer, 1995; Carayon, Yang & Lee, 1995; Frone, Russel & Cooper, 1995; Turnipseed, 1994; Martin & Wall, 1989). Yet, from a theoretical and a practical point of view, it is preferable to distinguish between these notions and to operationalise them more rigorously in order to better understand the psychological phenomena involved.
We propose to make a distinction between four notions, i.e. work demands, work load, work pressure and work stress. *Work demands* represent the objective requirements posed by the tasks to be performed and the working conditions. These demands are the same for each job incumbent. Examples of work demands are: task speed/rate, difficulty, complexity, uncertainty and responsibility. Task speed/rate is sometimes designated as 'time pressure' (e.g. Van Roon et al., 1996; Raby & Wickens, 1994; Moray et al., 1991) although this notion is also used in a subjective sense. *Work load* refers to the degree to which the person's individual resources are charged when carrying out work tasks. It can be considered as the subjective counterpart of the work demands. Since it depends on individual factors, such as the worker's capacity, psycho-physiological state, and work strategy, there is no one-to-one correspondence between demands and work load. Two people with equal work demands can have higher or lower work load, depending on dynamic intra-individual factors. The distinction between work demands and work load is an important one. It corresponds to the distinction between the *external work load* as an attribute of the task given to a person, and *internal* (also: functional or effective) *work load* as experienced by the person when actually carrying out the task. External work load refers to the demands posed by the work tasks to be performed, and hence is equivalent to work demands. Some languages use specific terms to refer to this distinction, e.g. 'Belastung' and 'Beanspruchung' in German (e.g. Hacker, 1997) or 'last' and 'belasting' in Dutch.

*Work pressure* is provisionally conceived of as a cognitive-energetic state of the person, producing the experience of strain or felt pressure, which is associated with the ongoing and anticipated execution of work tasks. At present it can best be understood as the subjective reflection of the person's psychological/physiological state while carrying out work tasks. Obviously, this state can vary and work pressure can augment or decline, depending a.o. on the worker's expectation of the amount of work that remains to be done and his/her assessment of the chance to accomplish the work successfully.
Although work pressure is conceived as a dynamic phenomenon, one would expect it to change less quickly than work load. Work pressure seems to be a more enduring state which may extend into people's leisure time.

*Stress* is defined as a state of excessive activation which results when one has been exposed to a threatening situation for a longer period, and when attempts to cope with, or to terminate the threatening situation fail. Work pressure can be such a threatening situation. Work pressure seems related to stress, but unlike stress it is specifically linked to work tasks to be performed and probably more susceptible to change. The difference, thus, is that stress is a-specific and relatively persistent, while work pressure seems specific and changeable. Work pressure may well be a precursor of stress, but under typical conditions work pressure may alternatively reach high levels and drop again, without ultimately causing stress. This implies that the 'wave-length' of work pressure is longer than that of work load and shorter than that of stress.

It is important to recognize that the phenomena dealt with here are inherently dynamic, and they are affected by a number of regulatory mechanisms. We distinguish between three such mechanisms: (1) the effort mechanism (Kahneman, 1973; Sanders, 1983; Mulder, 1986; Hockey, 1986, 1997; Zijlstra, 1993, 1996) which lowers or heightens the mental capacity in response to work load; (2) the strategic mechanism (Hacker, 1997; Sperandio, 1973; Hockey, 1986, 1997), which produces variations in strategy in response to work load (and perhaps work pressure); and (3) the fatigue-recovery mechanism (Meijman, 1989), which adjusts the person's state by means of recovery in response to fatigue. Each of these mechanisms can be supposed to have an influence on work load, as well as on work pressure.

*Here Figure 1*

Figure 1 presents a heuristic conceptual model showing the links between the four concepts introduced above. But it also incorporates a number of other concepts which were briefly mentioned above, including actual capacity,
psycho-physiological state, fatigue and recovery. Since work load not only depends on the level of the demands, but also on how long the person is exposed to them, work time is also included. Also included are outcomes of the work and the rewards they lead to. This aspect has been incorporated because of the findings by Siegrist et al. (1990) that rewards may counteract potential negative effects of work stressors on people. A final important element in the model is strategy. Through their choice of strategy people may take an influence on work demands, work time, and non-work factors. Strategy is dependent on 'control' (Ganster, 1989; Karasek & Theorell, 1990), i.e. the degree to which the work setting enables people to exert influence on their work.

The primary function of the model is to serve as a heuristic tool in developing a set of instruments and to direct research on work pressure. Although it incorporates the three regulatory mechanisms mentioned above, it does not represent a fully developed causal scheme of the factors and mechanisms related to work pressure.

Method

The first step in our study is the development of a set of instruments for the measurement of work demands, work load, work pressure and other concepts. This was done on the basis of the conceptual model presented above. Existing scales, published in the literature as well as questionnaires commonly used in the Netherlands, were scrutinized as to identify which scales and/or items would be appropriate for operationalizing the various concepts. Some of the items were re-sorted as to match our conceptual distinctions, mentioned above, and several new items were developed. Next, questionnaires were composed and tested in a small pilot study before administering them in the survey sample. Scales were formed on the basis of item analysis (item-test correlations and coefficients alpha).
To investigate the relationships between the variables we performed two types of analysis. First, work demands and work time were correlated with work load, work pressure, fatigue and stress, and regression analysis was applied. Next, we did path analysis on these and a few other variables, using LISREL-8 (Jöreskog & Sörbom, 1993).

In order to achieve a better understanding of how different configurations of work demands may affect work pressure, we conducted a cluster analysis (using SPSS Quick Cluster) and formed groups with different work demand profiles and compared them with respect to the level of work pressure, using analysis of variance.

Sample

For the purpose of the present study a sample of Dutch working people was drawn in the following way. From a random sample of some 8000 private phone numbers, 4000 numbers were selected. Those persons have been called in order to find people who would satisfy the criteria for participation in the study and would be ready to take part. The criteria were such that people had to be over 18 years old, perform a paid job, either as an employee or being self-employed, and make at least 8 hours per week. People without a paid job, such as housewives, retired people, and students were excluded from participation. People were asked whether they would be willing to take part in a study on work and working conditions conducted by the University of Tilburg. Addresses of those agreeing were taken down and people were sent a written questionnaire with a prepaid return envelope. A total of 2000 questionnaires were sent out, and 1130 have been returned; the return rate therefore was 56.5%. Information on the sample composition in terms of age, gender and education is given in Table 1. The distribution across economic sectors and types of work, categorized by the relative importance of data, people and things as work objects, is given in Table 2. It appears that the sample is
approximately representative of the Dutch work force, although persons with a higher education are somewhat over-represented.

Here Table 1

Here Table 2

**Measurement instruments**

Measures of work demands, work load and work pressure were made by means of scaling, using re-arranged items from other published instruments and new items generated by the research team. Along with questions concerning work time and non-work activities, these scales constitute the 'Tilburg Work Pressure Questionnaire' or T-WPQ. The work demands scales that are covered in the T-WPQ are:

- **Quantity**: the amount of work that must be performed.
- **Difficulty**: the degree of difficulty or complexity of the work tasks.
- **Intensity**: the degree of sustained and focused attention needed to do the work.
- **Emotiveness**: the degree to which the work implies emotionally demanding situations.
- **Responsibility**: the degree to which the work implies carrying responsibility for other people or for valuable goods.
- **Temporality**: the degree to which the work flow must meet deadlines, take place at a prescribed speed etc.
- **Multiplicity**: the degree to which the work involves multiple tasks.
- **Interruptiveness**: the degree to which the work is susceptible to interruptions.
Lack of support / hinder: the degree to which people lack the information, tools, personal assistance needed to carry out their work tasks, or feel that things get in their way.

Along with the T-WPQ we used a number of instruments for measuring other variables in the model. The variables involved in the present study are: Rewards (scale developed after Siegrist et al., 1990), Fatigue (measured by the CIS-20; Vercoulen et al., 1994; subscales: ‘subjective fatigue’, ‘concentration’, ‘energetic’, ‘activity’), and Burnout (MBI-Dutch version; Schaufeli & van Dierendonck, 1994; subscales: ‘emotional exhaustion’, ‘distance’, ‘competence’).

The coefficients alpha of the newly created scales are presented below in Table 3. Generally speaking the items appeared to be suitable for measuring the constructs. Only few items had to be deleted in order to raise the scale’s reliability.

Here Table 3

Structural relationships

A first impression of the structural relationships between the variables in this study comes from the pattern of correlations and regression weights. Table 4 gives the raw correlations and beta-weights of the nine work demands, the number of working hours and the number of household hours for the prediction of work load, work pressure, subjective fatigue and felt exhaustion. It is clear that the demands correlate strongest with work load, somewhat lesser with work pressure, and the least with exhaustion and fatigue. Apart from the relative position of fatigue and exhaustion, which can be supposed to influence each other mutually, this seems to be in agreement with the general structure.
of our conceptual model. The number of working hours correlate only with work load and work pressure. And for number of household hours weak negative correlations are found with three of the four criteria.

Here Table 4

The overall pattern of relationships was established by path analysis, using LISREL-8 (Jöreskog & Sörbom, 1993). The results are presented in Figure 2. The path model is the one that fits the data best. It was developed iteratively, suppressing paths with coefficients lower than 1.00, 1.50 and 1.96 (5% significance level) successively. The fit of the model is acceptable. The RMR is .037, the Goodness-of-Fit Index (GFI) is .97, the Adjusted Goodness of Fit Index (AFI) is .92, the Normed Fit Index (NFI) is .97. The model shows that some, but not all demands act as determinants of work load, and that work load is a determining factor of work pressure. Work pressure in its turn determines fatigue and exhaustion, whereas fatigue affects exhaustion as well. All this is more or less in accordance with our conceptual model. However, there are differences as well. Some demand factors seem to influence work pressure directly. Some demands produce rewards, which appears to counteract work pressure and fatigue, and indirectly also exhaustion. This latter finding is in agreement with the 'effort-rewards' model of Siegrist et al. (1990), which postulates that rewards are a good buffer against the unhealthy effects of work stressors. Of course, it should be kept in mind that the model does not display real causal links, since the data were all gathered at the same moment. Causal analysis based on longitudinal data will be left for a later moment.

Here Figure 2
Subgroup analysis

Since jobs may differ in the demands they pose to people and yet produce equally high work pressure, we have broken up the overall sample up in subgroups with different profiles of job demands and made a comparison between these groups. The groups were created by means of cluster analysis using SPSS Quick Cluster. A first analysis using the nine demand scales alone did not produce a clear solution, but including the number of working hours and gender did. Number of working hours is a relevant factor, since long work hours may add to the effects of otherwise similar job demands. Gender is relevant since there are systematic differences in job content and number of working hours between men and women. The final solution is based on an analysis of z-scores of demands, number of working hours and gender (with.01 decrement and 30 iterations)².

The analysis resulted in five job types with predominantly male job incumbents, six job types with predominantly female job incumbents and one mixed job type. The twelve job types are described in Figures 3 and 4.

Here Figure 3

Here Figure 4

It appears that there are clear differences between types of jobs in terms of the demands posed. Apart from job types with one or several high demands, there are several with low demands. Male and female job types seem similar apart from the number of working hours, which are typically longer for men. In our

Note: we are using perceived demands, since no information about objective demands could possibly be gathered.
description of the job types we have also indicated whether the respondents had substantial duties outside of the work, that is in the household. Some of the female groups with less work hours than the standard work week spent over 20 hours a week on household duties (including care).3

Six of the twelve job types, involving 47% of the total number of workers in the sample, can be characterized as highly demanding. This applies to: M1 (overtaxing male jobs), M2 (intense male jobs) and M3 (broad male jobs), F1 (overtaxing female jobs), F2 (intense female jobs), and F4 (ordinary female jobs), and to X1 (draining jobs, male and female). The other job types, comprising 53% of the respondents, pose moderate to low demands.

Looking at work pressure for the twelve job types, we find large and significant differences ($F = 44.39; \text{df} = 11,1082 \ p < .0001$). Work pressure is highest among X1 (emotionally draining jobs), M1 and F1 (overtaxing jobs, male and female), F2 (intense jobs female), and M3 (broad male jobs). Analyses carried out with fatigue, emotional exhaustion and health complaints give similar results.

To better understand the differences between the job types we also compared the job types with respect to a number of job content variables, that is: the mental vs. manual nature of the tasks, the work object (data-people-things), the use of technical tools. From this analysis it appears that in most jobs mental tasks dominate, and that higher demands are associated with a predominance of mental tasks. The lightest jobs are those with more manual tasks. The job types also differ in the work objects dealt with. On average dealing with people is more common in female jobs. A prevalence of people as work object is found for F1 (overtaxing female jobs) on the one hand, and F4 (ordinary female) and M5 (light female jobs) on the other hand. Male jobs at the lighter end of the scale, i.e. M4 and M5, more often have 'things' as work objects. Thus we find some evidence of gender segregation in work content, and are reminded of the fact that high demands can originate from different

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This variable is presented for descriptive and explanatory purposes. It was not included in the cluster analysis.
sources. Interestingly enough, we find that the work in category X1 (emotionally draining jobs) is almost exclusively focused on people. Here the number of respondents reporting 'work with people' amounts to 90%. There are also differences in the use of work support tools, like the use of the portable telephone and the laptop, which are more common in the groups M1 (overtaxed male jobs) and M2 (intense male jobs).

Discussion

Looking at the results of the foregoing, it appears that work pressure is a distinct phenomenon, that can neither be equated to high work demands, nor to high work load or work stress. There are positive correlations between demands, work load, and work pressure, to be sure, but they are not sufficiently high to consider all these variables as expressions of a single factor. The model that we propose can be seen as a kind a ‘stage-model’ in the process of developing stress and burnout. The work demands have an effect on workload, but the effects of demands on work pressure and fatigue and exhaustion are much weaker. The decrease in the Multiple $R^2$ from left to right in Table 4 illustrates this quite clearly.

For the sample as a whole, the main determinant of work pressure is high work load, which is in its turn produced by quantity, difficulty, intensity and hinder (lack of support). Higher demands are associated with greater rewards, and rewards seem to play a buffering role since it goes together with less work pressure, less fatigue and less exhaustion.

Our analysis of subgroups makes clear that high and low work pressure are associated with different profiles of work demands, typical for certain types of jobs. High work pressure is found in subgroups of workers who face high overall demands (M1 and F1), who have jobs with a high level of intensity (M2 and F2), those with a great variety of tasks (only male: M3), who have 'ordinary jobs' but make much hours in household (only female: F4), and those
who deal with people in emotionally demanding situations (male and female: X1). The number of people in these seven job categories is almost 50% of the total sample. Since the subgroups do not only differ in the pattern of work demand, but also in the overall balance of work and household hours, the factor time seems to play a role as well. However, further research is needed to clarify the role of temporal factors.

**Implications for practice**

With respect to practice a first lesson from this study is that high work demands do not necessarily result in high work pressure. Much depends on other factors and particularly on the rewards people receive from their work. This makes it desirable to look beyond signs of work pressure and to make a proper diagnosis of relevant situational and personal factors. An instrument like the T-WPQ may be helpful in this context. Secondly, it seems that, generally speaking, work pressure can be reduced in different ways: on the one hand by reducing the work demands or adjusting working (or household) hours, on the other hand by giving people more rewards for their work. Thirdly, we can conclude that the factors producing work pressure vary with the type of job people are in. This implies that job factors should be taken into account in making a diagnosis of high work pressure, and that the ways to reduce work pressure should depend on the particular constellation of demands in the job.

The results from the survey suggest some measures for preventing and reducing high work pressure in general, but they do not yield information about the ways in which people can cope with work pressure in everyday settings. For this we can rely on a study by Stuifbergen (1999), who conducted in-depth interviews with 24 people engaged in various types of jobs. This study examines the meanings people assign to work pressure, the conditions under which work pressure is felt, and the methods people use to cope with high work pressure. The study confirms that work pressure is a subjective state.
associated with expectations about the future flow of work, more in particular with the dynamic balance between the work that has to be done and the work that one is able to do. On the basis of this finding and the coping methods mentioned by the subjects we propose a simplified model in which work pressure is the outcome of a process of balancing the work that must be done and the work that can be done. The work that must be done can be seen as determined by work demands and work supply, whereas the work that can be done is seen as determined by the personal competence to meet the demands and the capacity to manage the work supply.

Here Figure 4

There are different opportunities for intervention, both corrective and preventive, and there is a role to play for the workers themselves, their supervisors, line management, and the personnel department. We propose the following options for intervention. Since work pressure does not occur constantly, but is a dynamic phenomenon, there is an important role to play for working people themselves. They may first of all regulate work pressure by: (1) planning their work tasks before they start working, by structuring their work, (re)scheduling it etc.; (2) spending more effort in order to meet the high demands, or to reduce the actual demands by changing one's work strategy; (3) doing overtime or taking work home. These methods have in common that they aim for maintenance of the level of work performance and adjustment of the individual's work capacity. Typical for the second group of methods is that they enable workers to protect themselves by lowering the standards of performance. This is done by: (4) isolating oneself from others in order to avoid disturbances and concentrate on the task; (5) giving in to constraints, deferring the work till a more suitable moment, and "giving up", that is, abandoning the task; (6) taking a break in order to restore one's work capacity. An important role for the supervisor lies in: (7) planning the overall work flow and (re)allocating the work across workers. In this way the supervisor may avoid
or reduce peak-loads and overload of individual workers. Moving to the line management there is a more structural and preventive solution, i.e. (8) (re)structuring the part of the organization that is susceptible to work pressure or changing its capacity by deploying a greater number of workers or prolonging the work hours. Intervention within the scope of line and personnel management are: (9) selection and placement of workers, with the purpose of adjusting the available competence to the overall work demands; and (10) providing training to workers as to increase their competence.

In order to decide about the appropriateness of all these interventions a good diagnosis is needed. Both the average level of work pressure and its distribution across the organization would have to be ascertained. When high levels of work pressure are found among almost all employees of a work unit, or an organization as a whole, one would think of organizational restructuring and / or work force expansion as appropriate measures. If high work pressure is found with particular jobs or at particular moments only, one would think of training the employees involved or alleviating high demand by better work flow planning. If level of work pressure is low to average for most of the time, one would put the emphasis on measures taken by the workers themselves or by their superior. In order for workers to effectively use the methods 1 through 6, they should have sufficient control in their work, either individually or as members of a work group.

Conclusions

On the basis of our study we come to the following conclusions:

1. Work pressure should be distinguished from work demands, to work load and work stress. Although its nature should be investigated further, it can currently best be understood as a dynamic state associated with the anticipated execution of work tasks. People experiencing high work pressure are in a state of cognitive and energetic activation. Subjectively
they are aware of the work to be done and are concerned about their ability to complete the work successfully.

2. The main determinant of work pressure is work load. Generally speaking, high work load is produced by high work demands with respect to quantity, difficulty, intensity and hinder (lack of support). High work pressure can be seen as a precursor of elevated fatigue and stress (burnout).

3. The perception of being properly rewarded for one's work counteracts the emergence of work pressure, fatigue and exhaustion. On the whole greater rewards are associated with higher demands.

4. The antecedents of high work pressure are not the same for all workers. They vary according to the nature of the job, the number of working hours and the number of hours spent in the household. There are some differences between men and women here.

5. Practical interventions aiming at reducing or preventing high work pressure should be based on an assessment of the work demand, work time, and should take the particularities of the job into account.

6. There is a wide range of possibilities for reducing and preventing high work pressure. Organizational re-structuring, work force expansion, extension of working hours, and improved planning are important, but such structural measures can be supplemented by selection, placement and training on the one hand, adjustments in planning and task allocation by the supervisor and various adjustments in the work process by the workers themselves. For this workers need sufficient control.
References


CONCEPTUAL MODEL OF WORK PRESSURE

Situational determinants of Work Pressure - The Netherlands, 1998
(N = 1129)

INVI = .37; GFI = .97; AIR = .92; NFI = .97
Figure 3

WORK DEMANDS AND WORK PRESSURE FOR JOB TYPES (MALE & MIXED)

Figure 4

WORK DEMANDS AND WORK PRESSURE FOR JOB TYPES (FEMALE)
Figure 5

Work pressure: Starting points for intervention

1. plan ahead
2. divide own work
3. spend more effort
4. change strategy
5. do overtime
6. take work home
7. isolate oneself
8. give in
9. defer
10. give up

8 7 Work demands x Work supply

9 dynamic balance 4 5 6

Competence x Work capacity

10 1 2 3
### Table 1

**SAMPLE COMPOSITION**  
(N=1129)

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### Table 2

**SAMPLE COMPOSITION**  
(N=1129)

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**Work Objects**  

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</tr>
<tr>
<td>Data &gt; Things &gt; People</td>
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### Table 3

Tilburg Work Pressure Questionnaire (WPQ)

<table>
<thead>
<tr>
<th>Scale</th>
<th>m</th>
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<tr>
<td>WORK DEMANDS</td>
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<tr>
<td>Quantity</td>
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</tr>
<tr>
<td>Difficulty</td>
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<td>.66</td>
</tr>
<tr>
<td>Intensity</td>
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<td>.72</td>
</tr>
<tr>
<td>Emotiveness</td>
<td>6</td>
<td>.80</td>
</tr>
<tr>
<td>Responsibility</td>
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<td>.71</td>
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<tr>
<td>Temporality</td>
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<td>.64</td>
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<tr>
<td>Multiplicity</td>
<td>6</td>
<td>.69</td>
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<tr>
<td>Interruptiveness</td>
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<td>.76</td>
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<tr>
<td>Lack of support</td>
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<td>.76</td>
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<td>WORK LOAD</td>
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<td>WORK PRESSURE</td>
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<tr>
<td>REWARDS</td>
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<td>FATIGUE ($)</td>
<td>20</td>
<td>.93</td>
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<tr>
<td>BURNOUT</td>
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<td></td>
</tr>
<tr>
<td>Exhaustion</td>
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<td>Distance</td>
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<td>Competence</td>
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Sample Dutch employed people, 1998 (N=1129)

### Table 4

Correlations and Beta's of Work Demands for 4 Criteria

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<tr>
<th>Work Demands</th>
<th>Work Load</th>
<th>Work Pressure</th>
<th>Fatigue (Subj)</th>
<th>Exhaustion</th>
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<tr>
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<td>.03</td>
<td>.26</td>
<td>.08</td>
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<td>-.10</td>
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