Appendix C. Stress measure based on a structural equation model

One of the most relevant topics of the survey was the measurement of wellbeing or strain, as an outcome of stressful situations. This study has initially focused on its nature and operationalization, setting up a model which built on both current and traditional literature as well as the experience of the research group.

In the original model developed stress is explained as a composite construct mediating between individual and environmental factors. Central issues of this model are the individual’s perception and appraisal of the situation as well as their coping abilities and strategies.

From a theoretical point of view stress/strain emerges from the combination of the self appraised mental health (depression) and personality, or the self-appraised self-efficacy experienced at work or for work-related matters; a third factor is the feeling of emotional exhaustion deriving from the job.

The scientific literature has widely recognized Depression and Emotional Exhaustion as part of the work stress process and outcomes (Duquette, Kerouac, Sandhu & Bedauet, 1994; Rahim & Psenicka, 1996; Rout, Cooper & Rout, 1996 ; Corrigan, Williams & McCraken, 1998; Vilhjalmsson, 1998 ; Vinokur, Pierce & Buck, 1999; Ito, Kurita & Shiiya, 1999; O’Connor, O’Connor, White & Bundred, 2000a; O’Connor, O’Connor, White & Bundred, 2000b; Mackie, Holdhan & Gottlieb, 2001; Tummers, Janssen, Landeweerd & Houkes, 2001).

Only a few studies have seriously considered Self-Efficacy when studying occupational stress. Self-efficacy refers to the confidence in one’s ability to behave in a way to produce desirable outcomes; perceived self-efficacy affects how people feel, think and behave (Bandura, 1977). In the case of setbacks, it has been found that people with higher levels of self-efficacy recover quickly and maintain commitments to their goals (Schwarzer, 1992). Although there is scant research on the social determinants of self-efficacy, it has been shown that this concept has an a significant effect in active coping and work-stress models (Gerin, Litt, Deich & Pickering, 1995) and thus may be an integral part of the coping process. In the present model, following Gerin et al, (1995) suggestion, Self-Efficacy has been assessed in terms of a specific situation

A tri-factorial model of stress has been empirically assessed and confirmed using Confirmatory Factor Analysis (CFA) (Joreskog & Sorbom, 1993) (fig. 3.1) and the population of the present study (total sample N= 1994 – Austria = 364; Finland = 492, Ireland = 366, The Netherlands = 405; UK = 367; Italy = 0).

The weights of the general model have been used for the analysis in this present research because they are more stable and therefore reliable.
An original model of stress

From organizational factors to organizational outcomes: further goodness of Fit indexes.

<table>
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<th>$\chi^2$/ df</th>
<th>RMSE A</th>
<th>R M R</th>
<th>SR M R</th>
<th>GF I</th>
<th>AG FI</th>
<th>CF I</th>
<th>NN FI</th>
<th>CN</th>
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<td>0.91</td>
<td>0.90</td>
<td>0.92</td>
<td>0.91</td>
<td>320,42</td>
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</tbody>
</table>

Chi-Square=2379.82, df=347, P-value=0.00000, RMSEA=0.058

The model fits the data both in the combined sample and in the country-specific sample. It can be concluded that the three selected variables – depression, emotional exhaustion and self-efficacy – are part of a latent factor explaining their variance.
References


