

# Research Companion to Working Time and Work Addiction

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## 9. Dr Jekyll or Mr Hyde? On the differences between work engagement and workaholism

**Wilmar B. Schaufeli, Toon W. Taris and Arnold B. Bakker**

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Although for the lay public workaholism is synonymous with working excessively hard, scholars have proposed several more elaborate definitions (for an overview see McMillan et al., 2003). However, to date, a generally accepted definition of workaholism is lacking. Moreover, there is still some controversy about its true nature: is workaholism good, bad, or maybe both? Ultimately, of course, the answer to this question depends on the way workaholism is defined. It is our contention that workaholism should be considered a negative psychological state akin to an addiction and that the recently introduced concept of work engagement is similar to ‘good’ workaholism. Thus, instead of distinguishing between ‘bad’ and ‘good’ forms of workaholism, we propose to differentiate between workaholism and work engagement. In order to provide an empirical basis for this distinction we assess in this article the discriminant validity of both concepts by: (a) analyzing the underlying factorial structure of the instruments that measure workaholism and work engagement; (b) assessing the relationships of both concepts with overwork; (c) investigating the associations of both concepts with employee well-being; (d) investigating the associations of both concepts with job performance.

### THE CONCEPTS OF WORKAHOLISM AND WORK ENGAGEMENT

The term ‘workaholic’ was coined in 1971 by an American professor of religion, Wayne E. Oates. According to Oates (1971, p. 11), workaholism is ‘the compulsion or the uncontrollable need to work incessantly’. For workaholics, the need to work is so exaggerated that it endangers their health, reduces their happiness, and deteriorates their interpersonal

relations and social functioning. Many other scholars agree with this view of the founding father of the concept that workaholism is – by definition – ‘bad’ because it is an addiction akin to alcoholism (Cherrington, 1980; Killinger, 1991; Robinson, 1989; Schaef and Fassel, 1988). As Porter (1996, pp. 70–71) has put it: ‘Whereas an alcoholic neglects other aspects of life for the indulgence in alcohol, the workaholic behaves the same for excessive indulgence in work.’

In contrast, others view workaholism as ‘good’. For instance, in a qualitative interview study, Machlowitz (1980) found workaholics to be both satisfied and productive. In a similar vein, Korn et al. (1987) regard workaholism as positive, at least from an organizational perspective. Accordingly, they call workaholics ‘hyper-performers’. For Cantarow (1979) the workaholic personality is positive because its hallmark is the joy of creativity and, according to her, workaholics seek passionate involvement and gratification through work. This agrees with Peiperl and Jones (2001, p. 388) who state: ‘We see workaholics as hard workers who enjoy and get a lot out of their work.’

Finally, many authors view workaholism positively *and* negatively; that is, they distinguish between different types, some of which are ‘good’ whereas others are ‘bad’. For instance, Keichel (1989) distinguished between happy and dysfunctional workaholics, and Naughton (1987) discriminates ‘good’ job-involved workaholics – who are high in work commitment and low in compulsion – from ‘bad’ compulsive workaholics – who are high in work commitment and high in compulsion. Furthermore, Scott et al. (1997) identified compulsive-dependent workaholics, perfectionist workaholics, and achievement-oriented workaholics, whom they referred to as hyper-performers (cf. Korn et al., 1987). The most widely empirically studied approach to workaholism assumes three underlying dimensions; the so-called *workaholic triad* consisting of work involvement (that is, being highly committed to work and devoting a good deal of time to it), drive (that is, feeling compelled to work because of inner pressures), and work enjoyment (that is, experiencing work to be pleasant and fulfilling) (Spence and Robbins, 1992). Different combinations of these three elements are assumed to produce different types of workaholics: (a) non-enthusiastic workaholics, who are high in involvement, high in drive, and low in enjoyment; (b) enthusiastic workaholics, who are high in involvement, high in drive, and high in enjoyment; and (c) work enthusiasts who are high in involvement and enjoyment and low in drive. Buelens and Poelmans (2004, p. 454) refer to this final group as the ‘happy hard workers’, who ‘are enthusiastic, meet interesting people, love their jobs, and avoid conflict at home and in the workplace, possibly owing to their resulting positive attitude and a high level of social intelligence’.

This description of work enthusiasts – the ‘good’ workaholics – agrees with the recently introduced concept of work engagement, the positive opposite of job burnout (Maslach et al., 2001). Contrary to those who suffer from burnout, engaged employees have a sense of energetic and effective connection with their work activities and they see themselves as able to deal well with the demands of their job. More specifically, work engagement refers to a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication and absorption (Schaufeli et al., 2002a). Vigor is characterized by high levels of energy and mental resilience while working, the willingness to invest effort in one’s work, and persistence also in the face of difficulties. Dedication refers to being strongly involved in one’s work, and experiencing a sense of significance, enthusiasm, inspiration, pride and challenge. Finally, absorption is characterized by being fully concentrated on and happily engrossed in one’s work, whereby time passes quickly and one has difficulties with detaching oneself from work.

Engaged employees work hard (vigor), are involved (dedicated) and feel happily engrossed (absorbed) in their work. In this sense they seem similar to workaholics. However, in contrast to workaholics, engaged workers lack the typical compulsive drive. For them work is fun, not an addiction, as was concluded from a qualitative study among 15 engaged workers (Schaufeli et al., 2001). Engaged employees work hard because they like it and not because they are driven by a strong inner urge they cannot resist. Hence, for the sake of conceptual clarity, instead of discriminating between ‘good’ and ‘bad’ forms of workaholism, we propose to discriminate between workaholism (being intrinsically bad) and work engagement (being intrinsically good). In doing so we follow the recommendation of Porter (1996, p. 71), who calls on students of workaholism to ‘return to the origin of the term as a starting point for future research’. And this origin is an addiction to work. Porter (ibid.) argues that, like alcoholism, workaholism is an addiction which is characterized by (1) excess work behavior implying the neglect of family, personal relationships and other responsibilities; (2) distorted self-concept (that is, striving through work for better feelings of self); (3) rigidity in thinking (that is, perfectionist about work details, non-delegation of tasks); (4) physical withdrawal into work and anxiety if away from work; (5) progressive nature (that is, needs increasingly to work more to boost self-esteem and block other feelings); (6) denial (that is, uses workplace affirmations to offset objections from others). By definition, this original ‘bad’ view of workaholism as an addiction – as first expressed by Oates (1971) – excludes perspectives that consider workaholism ‘good’ (for example, Cantarow, 1979; Keichel, 1989; Korn et al., 1987; Machlowitz, 1980; Peiperl and Jones, 2001; Scott et al., 1997).

In defining workaholism we follow the lead of Scott et al. (1997), who, after critically reviewing the literature, summarize three features of workaholism. First, workaholics spend a great deal of time in work activities when given the discretion to do so – they are excessively hard workers. Second, workaholics are reluctant to disengage from work and they persistently and frequently think about work when they are not at work. This suggests that workaholics are obsessed with their work – they are compulsive workers. The third element in Scott et al.'s (1997) definition is that workaholics work beyond what is reasonably expected from them to meet organizational or economic requirements. This is a specification of the first and second features, because it deals with the *motivation* for spending an excessive amount of time on work. That is, workaholics work harder than is required out of an inner compulsion, need or drive, and *not* because of external factors such as financial rewards, career perspectives, a poor marriage or organizational culture. In sum, we distinguish two aspects of workaholism: working excessively and working compulsively.

## THE MEASUREMENT OF WORKAHOLISM AND ENGAGEMENT

In line with our conceptualization of workaholism, we operationalize it in terms of two scales, namely *Working Excessively* and *Working Compulsively*. These scales are taken from two frequently used workaholism inventories: the Work Addiction Risk Test (WART; Robinson, 1999) and the Workaholism Battery (WorkBat; Spence and Robbins, 1992), respectively. Unfortunately, the label of the scale of the WART that we use to assess excess work (Control Tendencies) is somewhat misleading because most of its items refer to working hard, without any reference to the underlying motivation, whereas the remaining items refer to the inability to relax and to feeling guilty when not working. For that reason we re-labeled the Control Tendencies scale as Working Excessively. A recent validity study, using three independent Dutch samples, showed that the Work Excess scale could be used as a short version of the full 25-item WART (Taris et al., 2005).

Studies on the factorial validity of the WorkBat failed to confirm Spence and Robbin's (1992) three-factor model of workaholism that included work involvement, work enjoyment and drive (Kanai et al., 1996; McMillan et al., 2002). Instead, the data suggest the elimination of the work involvement factor, leaving a two-factor model with enjoyment and drive as the core components of workaholism. In the current study only the drive component was included, because in our definition of workaholism we exclude 'good' forms of workaholism that are characterized by enjoyment. The

Drive scale of the WorkBat, that explicitly refers to the compulsive nature of the underlying motivation to work hard as well as to the compulsiveness of excessive work behavior, was relabeled as Working Compulsively so that it fits our definition of workaholism.

Work engagement is operationalized in the current study with the Utrecht Work Engagement Scale (UWES), a self-report instrument that includes the three dimensions mentioned above: vigor, dedication and absorption (Schaufeli et al., 2002a). Extensive psychometric research with the UWES showed encouraging results (for an overview, see Schaufeli and Salanova, forthcoming). For instance, the three subscales (vigor, dedication and absorption) are interrelated, internally consistent, and stable across time. Moreover, these favorable psychometric characteristics have been observed in different types of samples in different countries.

### **Correlates of Workaholism and Engagement**

Three types of correlates are used for studying the discriminant validity of workaholism and work engagement.

#### **Overwork**

The most obvious characteristic of workaholics is that they work beyond what is required. Consequently, they devote much more time to their work than do others (for example, Brett and Stroh, 2003; Buelens and Poelmans, 2004; Mudrack and Naughton, 2001; Scott et al., 1997). For instance, North American workaholics work on average 50–60 hours per week (Burke, 1999; Peiperl and Jones, 2001; Spence and Robbins, 1992). Not surprisingly, positive correlations have been found between the time committed to the job (for example, working during weekends, taking work home) and workaholism (Burke, 1999; Kanai et al., 1996; Kanai and Wakabayashi, 2001; Spence and Robbins, 1992; Taris et al., 2005).

In a similar vein, it appears from a large representative sample of the Dutch full-time workforce that work engagement is associated with overwork (Beckers et al., 2004). However, results from in-depth interviews suggest that engaged employees work long hours but that they lack the obsession to work that is characteristic of workaholics (Schaufeli et al., 2001). Thus, it seems that engaged employees work hard but not compulsively so.

#### **Well-being**

Workaholics report relatively high levels of job strain and (mental) health complaints, particularly as far as the drive or compulsion component is concerned (Burke, 1999, 2000, 2001; Burke et al., 2004; Buelens and Poelmans, 2004; Kanai et al., 1996; McMillan and O'Driscoll, 2004; Mudrack and

Naughton, 2001; Spence and Robbins, 1992; Taris et al., 2005). Therefore, it is not surprising that McMillan and O'Driscoll (2004) suggest that 'drive may be the toxic (i.e. harmful) element in workaholism, while enjoyment may be a protective factor that buffers the influence of drive' (p. 517). Furthermore, it seems that, compared with non-workaholics, life satisfaction of workaholics is low (Bonebright et al., 2000). The latter study also shows that life satisfaction of work enthusiasts (in our terms: engaged workers) is significantly higher than that of both 'bad' workaholic groups (that is, the enthusiastic and non-enthusiastic workaholics). Similar results were obtained by Buelens and Poelmans (2004), who observed that 'bad' workaholics were dissatisfied with their salary, family, relationships at work, and relationships with their supervisor, whereas 'good' work enthusiasts were quite satisfied in these respects.

Work engagement is negatively related to burnout (Demerouti et al., 2001; Durán et al., 2004; Montgomery et al., 2003; Salanova et al., 2000; Schaufeli et al., 2002a, b) and psychosomatic health complaints (Demerouti et al., 2001; Schaufeli and Bakker, 2004). In addition, qualitative (Schaufeli et al., 2001) and quantitative evidence (Hallberg and Schaufeli, 2006; Schaufeli et al., 2005) suggests that engaged employees enjoy good mental health.

### **Job performance**

Whereas some authors maintain that workaholics are extremely productive (for example, Korn et al., 1987; Machlowitz, 1980; Peiperl and Jones, 2001), others have claimed the opposite (Oates, 1971; Porter, 2001). The latter argue that workaholics work hard rather than smart. They create difficulties for their co-workers, suffer from perfectionism, are rigid and inflexible, and do not delegate. Unfortunately, virtually no empirical research has been carried out on the relationship between workaholism and job performance. Burke (2001) found some indirect evidence suggesting that workaholics do not perform particularly well: workaholic behaviors were *not* associated with salary increases. Because research is lacking, no firm prediction can be made about the nature of the relationship between workaholism and job performance. However, we expect that, given the long list of negative attitudes and behaviors that might interfere with job performance (Scott et al., 1997, p. 291), workaholics are not necessarily good and are perhaps even poor performers.

There is some preliminary evidence that engaged employees perform better than their less engaged colleagues. Recently, Salanova et al. (2005a) showed that levels of work engagement of contract employees in hotels and restaurants were positively related to service quality, as perceived by customers. In a similar vein, the more engaged students are with their



studies, the more exams they pass during subsequent semesters (Schaufeli et al., 2002b) and the higher their next year's grade point average (Salanova et al., 2005b). Using a different measure of work engagement, Harter et al. (2002) demonstrated that employees' levels of engagement are positively related to business-unit performance (for example, customer loyalty, profit and productivity).

## THE PRESENT RESEARCH

The purpose of the current study is to distinguish between 'good' and 'bad' workaholism, the former being re-phrased as work engagement. Basically, the WorkBat (Spence and Robbins, 1992) claims to make this distinction, namely between 'workaholics' and 'work enthusiasts', whereby the former score high on involvement and drive and low on enjoyment whereas the latter score high on involvement and enjoyment but low on drive. So why perform the current study then? There are two reasons for this, a methodological one and a conceptual one. First, Spence and Robbins (1992) have been criticized for clustering people (that is, workaholics and work enthusiasts) before validating the scales on which the profiles were based (McMillan et al., 2002). And, unfortunately, the assessment of this validity did yield negative results (Kanai et al., 1996; McMillan et al., 2002). In addition, on a more fundamental level, because for the assessment of different psychological phenomena ('good' and 'bad' workaholism) the same instrument was used, these assessments are not independent from each other. An analogy with positive and negative affect may illustrate this point. Research on the structure of affect demonstrated that a low score on sadness (negative affect) differs from a high score on happiness (positive affect), and vice versa (Lloret and Gonzalez-Romá, 2003). In other words, when people do not enjoy their work this does not mean that they hate their jobs, and when they do not hate their jobs this does not mean that they feel enthusiastic about them. Second, on a conceptual level, Spence and Robbins (1992) maintain that work enjoyment is part of their 'workaholic triad'. But if one agrees with the original view of workaholism as an addiction to work, that is, excessive and persistent work behavior with *harmful consequences*, this precludes any type of 'good' workaholism. We feel that the conceptual analysis of Porter (1996) convincingly showed that, in essence, workaholism is an addiction to work and thus inherently 'bad'. In short, we believe that, in order to study distinct psychological states, different labels and different assessment instruments should be used. Only in this way can the question whether or not these states are different be studied empirically.

More specifically, we assessed the discriminant validity of workaholism (working hard compulsively) and work engagement (vigor, dedication and absorption). We used an Internet survey to test our hypotheses which was completed by over 2000 Dutch employees. First, we investigated the factorial validity of the measurement instruments that were used to assess workaholism and work engagement. Can the items that are supposed to measure workaholism be distinguished from those that are intended to measure work engagement? For that purpose, the fit to the data of a one-factor model including *all* workaholism and *all* work engagement items was compared with that of a three-factor model that includes the two workaholism scales (Working Excessively and Working Compulsively) as well as work engagement. We expect (*Hypothesis 1*) that the fit of the latter model is superior to that of the former model, which would demonstrate the distinctiveness of both instruments.

To further examine the validity of the distinction between Working Excessively and Working Compulsively on the one hand and Work Engagement on the other, these scales will be related to concepts that are theoretically related to both workaholism and engagement but that are expected to show different patterns of relationships with these concepts. Three additional hypotheses are tested that specify different relationships of workaholism and work engagement with overwork, employee well-being, and performance, respectively.

*Hypothesis 2:* Like engagement, workaholism is associated with overwork, but this association is stronger for the work excess component than for the compulsion component of workaholism.

*Hypothesis 3:* Workaholism is negatively related to employee well-being, whereas associations with work engagement are positive.

*Hypothesis 4:* Workaholism is negatively related to job performance, whereas associations with work engagement are positive.

## **Method**

### **Sample**

Participants in this study were Dutch employees from a wide range of companies and occupations, who participated in a survey on the Internet ( $N = 2,164$ ). Table 9.1 compares some characteristics of the current sample with those of the Dutch workforce as a whole (Statistics Netherlands, 2005).

The chi-square tests reported in Table 9.1 show that males, younger workers and highly educated persons were significantly overrepresented in

Table 9.1 Sample characteristics compared with the Dutch workforce

| Sample characteristic                 | Current sample (%)<br>( <i>N</i> = 2164) | Dutch workforce (%)*<br>( <i>N</i> = 7 444 000) |
|---------------------------------------|--|---|
| <i>Gender</i> <sup>a</sup>            |  |   |
| Men                                   | 64                                       | 58  |
| Women                                 | 36                                       | 42  |
| <i>Age</i> <sup>b</sup>               |  |   |
| 15–24                                 | 12                                       | 15  |
| 25–44                                 | 55                                       | 52  |
| 45–65                                 | 33                                       | 33  |
| <i>Employment status</i> <sup>c</sup> |  |   |
| Company employed                      | 88                                       | 87  |
| Self-employed                         | 12                                       | 13  |
| <i>Educational level</i> <sup>d</sup> |  |   |
| Low                                   | 12                                       | 27  |
| Medium                                | 31                                       | 43  |
| High                                  | 57                                       | 30  |

*Notes:*

<sup>a</sup> = Chi-square with 1 *df* (*N* = 2164) = 32.00, *p* < .001;

<sup>b</sup> = Chi-square with 2 *df* (*N* = 2164) = 16.58, *p* < .001;

<sup>c</sup> = Chi-square with 1 *df* (*N* = 2164) = 1.86, *ns*;

<sup>d</sup> = Chi-square with 2 *df* (*N* = 2164) = 777.35, *p* < .001.

\**Source:* Statistics Netherlands (2005).

our sample, compared with the Dutch workforce. This is a frequently recurring phenomenon in Internet surveys (for example, Bandilla et al., 2003), whereas the differences between the sample and the population categories are relatively small (< 7 per cent), with the notable exception of the number of highly educated workers (57 per cent of our sample were highly educated workers, whereas only 30 per cent of the population are highly educated). There were no differences in employment status.

### Procedure

Between September 2004 and April 2005 a survey was published on the website of the largest Dutch popular psychology magazine. Visitors to its homepage were invited to learn more about their work-related well-being – specifically workaholism and work engagement – by filling out a 60-item questionnaire that included socio-biographical background variables, questions about their job, and the questionnaires discussed below. The confidentiality and anonymity of the data was emphasized. After filling out the survey, participants were informed about their engagement and

workaholism scores, which were calculated on-line, and they received feedback that was automatically customized to their own workaholism and engagement scores. The data were automatically written to an external file. The data of 64 persons (3 per cent) were excluded from the analyses, because a closer look at the time of questionnaire completion, gender, age, profession, and the response pattern suggested that they had filled out the web survey more than once.

### Instruments

*Workaholism* was measured with two scales: (1) the nine-item Dutch version (Taris et al., 2005) of the Compulsive Tendency scale proposed by Flowers and Robinson (2002), which was relabeled *Working Excessively* ( $\alpha = .84$ ); (2) the eight-item Drive scale of Spence and Robbins' (1992) WorkBat, which was relabeled *Working Compulsively* ( $\alpha = .86$ ). Both scales were scored on a 4-point rating, ranging from 1 ('totally disagree') to 4 ('totally agree') and correlate positively ( $r = .66, p < .001$ ). Both workaholism scales are available on [www.schaufeli.com](http://www.schaufeli.com).

*Work engagement* was assessed with the shortened, nine-item version of the Utrecht Work Engagement Scale (UWES; Schaufeli et al., 2006) ( $\alpha = .93$ ). Example items are: 'At my job I feel strong and vigorous' and 'I am immersed in my work'. All items were scored on a seven-point rating scale ranging from 0 ('never') to 6 ('always').

*Overwork* was measured with two separate questions: 'How often do you take work home?' and 'How often do you work at weekends?' scored on a four-point rating scale ranging from 1 ('almost never') to 4 ('almost always'). The answers on both questions correlate strongly ( $r = .54, p < .001$ ). In addition, an index was calculated of the *percentage of overtime* using the formula  $[(a - c)/c] * 100$ , whereby  $a$  equals the number of actual work hours per week and  $c$  equals the number of contractual working hours per week. The mean percentage of overtime is 15.9 per cent ( $SD = 16.1$ ), meaning that on average employees worked almost 16 per cent longer than was agreed upon in their labor contract. As expected, taking work home and working at weekends is correlated positively with the percentage of overwork ( $r = .47$  and  $r = .39$ , respectively both  $p < .001$ ).

*Employee well-being* was assessed with three indicators: (1) a rating of one's own level of *perceived health*: 'Generally speaking, how healthy do you feel?' (with a four-point rating scale ranging from 1 = 'almost never' to 4 = 'almost always'); (2) a rating of one's level of *overall life satisfaction*: 'Generally speaking, how satisfied are you with your life as a whole?' (with a four-point rating scale ranging from 1 = 'almost never' to 4 = 'almost always'); (3) the number of *sickness absence days* during the previous 12 months ( $M = 7.68$ ;  $SD = 27.02$ ). Perceived health and happiness are

correlated positively ( $r = .48$ ;  $p < .001$ ) whereas both indicators are negatively related to sickness absence ( $r = -.23$  and  $r = -.12$ , respectively both  $p < .001$ ).

*Job performance* was assessed with three scales. *In-role performance*, which is defined as those officially required outcomes and behaviors that directly serve the goals of the organization (Motowidlo and Van Scotter, 1994), was measured by three items of Goodman and Svyantek's (1999) scale (for example, 'Achieves the objectives of the job'). Participants were asked to indicate the extent to which they found each statement characteristic of themselves (0 = not at all characteristic, 6 = totally characteristic) ( $\alpha = .86$ ).

*Extra-role performance*, which is defined as discretionary behaviors that are believed to directly promote the effective functioning of an organization without necessarily directly influencing an employee's productivity (also termed *organizational citizenship behaviors*, McKenzie et al., 1991), was also measured by three items of Goodman and Svyantek's (1999) scale (for example, 'Willingly attends functions not required by the organization, but which help in its overall image'). The response format is similar to that used for in-role performance ( $\alpha = .74$ ). Finally, the employee's level of *innovativeness* at work was measured by six items (for example, 'I invent new solutions for problems at work') based on Janssen (2003). A five-point response format was used, ranging from 1 ('never') to 5 ('very often') ( $\alpha = .90$ ).

## Results

### The distinction between the measures of workaholism and work engagement (*Hypothesis 1*)

Structural equation modeling methods as implemented by AMOS (Arbuckle, 1997) were used to test the fit of two competing models: the one-factor model that includes *all* seventeen workaholism and *all* nine work engagement items (M1) versus the three-factor model that includes both workaholism dimensions (Working Excessively and Working Compulsively) and work-engagement (M2). Maximum likelihood estimation methods were used and the input for each analysis was the covariance matrix of the items. The goodness-of-fit of the models was evaluated using the  $\chi^2$  goodness-of-fit statistic. However,  $\chi^2$  is sensitive to sample size so that in a large sample – as in the present study – the probability of rejecting a hypothesized model is very high. To overcome this problem, the computation of relative goodness-of-fit indices is strongly recommended (Bentler, 1990). Two relative goodness-of-fit indices were computed: the Non-Normed Fit Index (NNFI) and the Comparative Fit Index (CFI). The latter is

particularly recommended for model comparison purposes (Goffin, 1993). For both relative fit-indices, as a rule of thumb, values greater than .90 are considered as indicating a good fit (Byrne, 2001, pp. 79–88). In addition, the Root Mean Square Error of Approximation (RMSEA) is computed; for which values up to .08 indicate a reasonable fit of the model (Cudeck and Browne, 1983).

The fit to the data of M1 and M2 is displayed in Table 9.2. M1 fits poorly to the data, and thus – not surprisingly – the fit of M2 is clearly superior to that of M1:  $\Delta\chi^2$  ( $df=4$ ) = 9875.16,  $p < .001$ . Inspection of the so-called Modification Indices for M2 revealed that the fit of the model could be increased by allowing two items tapping Working Excessively to load on the latent Working Compulsively factor. This makes sense because inspection of their contents revealed that rather than working excessively both items reflect work compulsion: ‘I feel guilty when I am not working on something’ and ‘It is hard for me to relax when I am not working’. Therefore it was decided to change both workaholism scales accordingly: the revised work excess scale now contains seven items ( $\alpha = .80$ ) and the revised Working Compulsively scale 10 items ( $\alpha = .86$ ). The fit of M3 could be improved significantly by allowing four pairs of errors to correlate:  $\Delta\chi^2$  ( $df=4$ ) = 749.31,  $p < .001$ . The rationale for this decision lies in the overlapping item content. For instance, the Working Compulsively items ‘I feel obliged to work hard, even when it’s not enjoyable’ and ‘It’s important to me to work hard even when I don’t enjoy what I’m doing’ both refer to a strong need to work hard even when it is no fun. The fit of the final model M4 is superior to that of the one-factor model ( $\Delta\chi^2$  ( $df=6$ ) = 11130.38,  $p < .001$ ), with all fit-indices satisfying their respective criteria (see Table 9.2). Both latent factors, Working Excessively and Working Compulsively, are highly correlated ( $r = .75$ ;  $p < .001$ ), whereas the correlations of these two workaholism factors with engagement are substantially lower:  $r = .33$  ( $p < .001$ ) and  $r = .05$  (*n.s.*), respectively. In conclusion: *Hypothesis 1* is confirmed: the two aspects of workaholism – working

Table 9.2 Fit of models specifying the relationship between workaholism and work engagement ( $N = 2164$ )

| Model description            | $\chi^2$ | df  | AGFI | GFI | NFI | NNFI | CFI | RMSEA |
|------------------------------|----------|-----|------|-----|-----|------|-----|-------|
| M1 1-factor                  | 14030.40 | 300 | .35  | .44 | .49 | .45  | .50 | .15   |
| M2 Original 3-factor         | 4155.24  | 296 | .83  | .86 | .85 | .85  | .86 | .08   |
| M3 Revised 3-factor          | 3649.33  | 296 | .85  | .88 | .87 | .88  | .87 | .07   |
| M4 M3 plus correlated errors | 2900.02  | 292 | .88  | .90 | .90 | .91  | .91 | .06   |

Note: For M1–M4 see text.

excessively and working compulsively – and work engagement can be distinguished from each other.

### Relationships with overwork (*Hypothesis 2*)

Table 9.3 shows the relationships between the three indicators for overwork, and workaholism and work engagement. As hypothesized, *all* correlations displayed in Table 9.3 are positive, and *all* three indices of overwork are more strongly correlated with Working Excessively than with Working Compulsively: notably, work at weekends ( $t(2161) = 4.30, p < .001$ ), take work home ( $t(2161) = 9.12, p < .001$ ) and overwork percentage ( $t(2161) = 12.88, p < .001$ ). Consequently, the mean correlation across all three indicators of overwork also differs significantly ( $t(2161) = 11.35, p < .001$ ) between Working Excessively and Working Compulsively, with the former showing the strongest mean correlation ( $r = .40$  vs.  $r = .29$ ). This means that *Hypothesis 2* is confirmed. Additional analyses revealed that employees' *actual* work hours are more strongly related to all three measures than their contractual work hours: for Working Excessively,  $r = .47$  ( $p < .001$ ) vs.  $r = .26$  ( $p < .001$ ); for Working Compulsively,  $r = .29$  ( $p < .001$ ) vs.  $r = .14$  ( $p < .001$ ); and for Work Engagement,  $r = .24$  ( $p < .001$ ) vs.  $r = .08$  ( $p < .01$ ).

### Relationships with employee well-being (*Hypothesis 3*)

In order to test *Hypothesis 3* on the relationship between workaholism and engagement on the one hand and employee well-being on the other hand, a path model was tested using AMOS (Arbuckle, 1997). That is, the model that was fitted to the data included exclusively observed variables. To correct for measurement error of the scale scores, the error variances of Working Excessively, Working Compulsively and Work Engagement were estimated using the formula  $1 - \alpha$  (Var).

Table 9.3 Correlations of overwork with working excessively (*WE*), working compulsively (*WC*) and work engagement (*EN*) ( $N = 2164$ )

|                  | WE  | WC  | EN  |
|------------------|-----|-----|-----|
| Work at weekends | .30 | .25 | .29 |
| Take work home   | .47 | .36 | .26 |
| Overwork (%)     | .42 | .26 | .25 |
| Mean correlation | .40 | .29 | .27 |

Note: For all  $r$ 's,  $p < .001$ .

The resulting model that is displayed in Figure 9.1 fits quite well to the data:  $\chi^2 (df=5)=33.31$  ( $p<.001$ ); AGFI = .98; GFI = .99; NFI = .99; NNFI = .96; CFI = .99. All estimated parameters in Figure 9.1 differ significantly from zero ( $p<.001$ ) and the model explains 19 per cent, 1 per cent and 16 per cent of the variance in health, sickness absenteeism and happiness, respectively. As predicted, workaholism is negatively related to perceived health and well-being, whereas associations with work engagement are positive (Figure 9.1). More particularly, Working Excessively and Working Compulsively are both negatively related to perceived health, but neither Working Excessively nor Working Compulsively is significantly related to sickness absence. In addition, Working Compulsively is negatively related to happiness, whereas Work Engagement is positively related to perceived health and happiness, and negatively related to sickness absence. Finally, the pattern of relationships between Working Excessively, Working Compulsively and Work Engagement is similar to M4 (see above) and – as to be expected – perceived health is negatively related to sickness absenteeism and positively to happiness. In sum, employees who work excessively hard report poor health and employees who work compulsively report that they feel less happy as well. Engaged employees, on the other hand, feel healthy and happy and they indicate that in the previous year they have been less frequently absent from work because of sickness. This

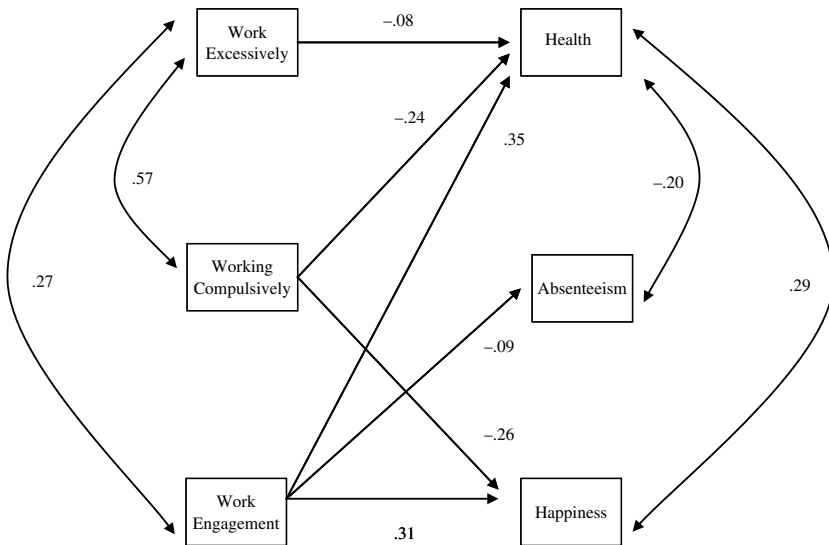


Figure 9.1 The relationships between workaholism, work engagement and employee well-being



means that *Hypothesis 3* is largely confirmed: six out of nine associations were significant and in the expected direction.

**Relationships with job performance (*Hypothesis 4*)**

In order to test *Hypothesis 4* on the relationship between workaholism and engagement on the one hand and performance on the other hand, a path model was tested using the same procedure as outlined above.

The model with three performance indicators displayed in Figure 9.2 only includes significant paths ( $p < .001$ ) and fits quite well to the data:  $\chi^2 (df=4) = 6.19 (p = .19)$ ; AGFI = .99; GFI = 1.00; NFI = 1.00; NNFI = 1.00; CFI = 1.00. The model explains 14 per cent, 15 per cent and 23 per cent of the variance in in-role performance, extra-role performance and innovativeness, respectively. Contrary to expectations workaholism is also positively related to employee performance. More particularly, Working Excessively and Working Compulsively are related to extra-role performance but *not* to in-role performance. In addition, Working Excessively is positively related to innovativeness. Engagement is positively related to all three performance indicators. Finally, the pattern of relationships between Working Excessively, Working Compulsively and Work Engagement is similar to M4 and to the model displayed in Figure 9.1. In sum, employees who work excessively hard and who work compulsively exhibit greater

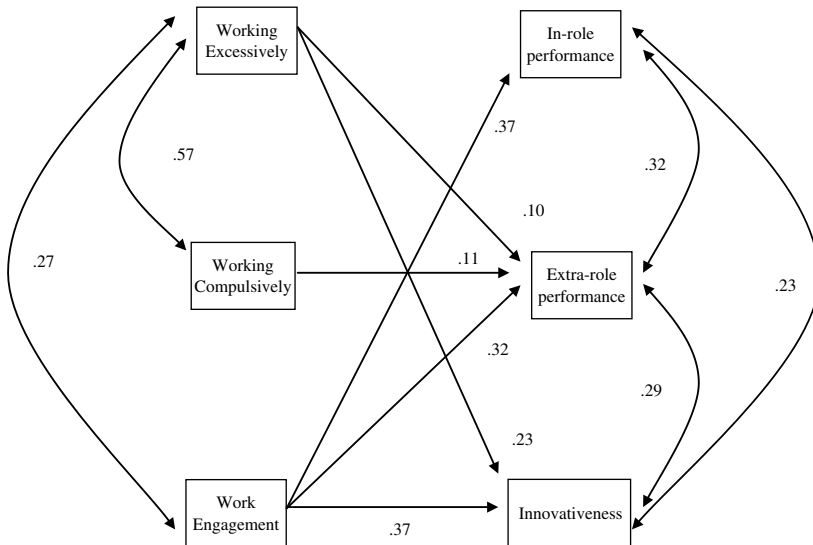


Figure 9.2 The relationships between workaholism, work engagement and employee performance

extra-role performance, whereas those who only work hard also show more innovativeness. Engaged employees, on the other hand, report more in-role and extra-role performance as well as more innovativeness. This means that *Hypothesis 4* was confirmed for engagement but *not* for workaholism.

## **Discussion**

The aim of the present chapter is to contribute to the ongoing discussion about the ‘good’ or ‘bad’ nature of workaholism. The literature on workaholism is inconclusive on this issue; some authors consider workaholism as inherently ‘bad’, some consider it inherently ‘good’, whereas still others consider it ‘good’ or ‘bad’, depending on its form (see Snir and Harpaz, 2004, for an overview). We believe that it is wrong to subsume different psychological phenomena under the same rubric (for example, ‘good’ workaholism and ‘bad’ workaholism), not only because it obscures differences and creates conceptual confusion, but also because it hinders empirical research. This is even more salient when the phenomena are assessed by the same instrument, such as the WorkBat (Spence and Robbins, 1992).

The first contribution of our study is that we introduced the recently emerged notion of work engagement (Maslach et al., 2001; Schaufeli et al., 2002a) as the equivalent of what has been described in the literature as ‘good’ workaholism, denoted by such terms as hyper-performing workaholics (Korn et al., 1987), happy workaholics (Keichel, 1989), achievement-oriented workaholics (Naughton, 1987), work enthusiasts (Spence and Robbins, 1992) and happy hard workers (Buelens and Poelmans, 2004). So we refined and clarified the conceptual framework to study positive and negative forms of employee well-being.

Secondly, we operationalized ‘good’ workaholism or engagement using the Utrecht Work Engagement Scale (Schaufeli et al., 2002a), which includes items that refer to vigor (working hard), dedication (being involved) and absorption (feeling happily engrossed in one’s work). ‘Bad’ workaholism was defined as a behavioral pattern that is characterized by working excessively hard out of an inner compulsion. This conceptualization is similar to its original meaning, as formulated by Oates (1971), who characterized workaholism as an addiction akin to alcoholism (see also Porter, 1996).

Third, we demonstrated the discriminant validity of workaholism (working hard compulsively) versus work engagement by showing that the instruments to assess workaholism and work engagement can be distinguished, and that both concepts relate differently to various sets of variables (that is, overwork, employee health and performance). Below, the results are discussed in greater detail.

### **The distinction between the measures of workaholism and work engagement (Hypothesis 1)**

Using a large Internet survey that included over 2000 Dutch employees, we first studied the factorial validity of the questionnaires that were used to assess workaholism and work engagement. Confirmatory factor analyses showed that the fit to the data of the three-factor model including both workaholism scales (Working Excessively and Working Compulsively) and work engagement was superior to that of the undifferentiated one-factor model in which all items were lumped together. This means that *Hypothesis 1* was confirmed: both workaholism components can be differentiated for work engagement. As expected, these two workaholism components are strongly correlated, sharing more than half of their variances. The finding that the excess work component was positively correlated with work engagement, whereas the compulsion component was *not*, underscores that working compulsively, rather than working hard, lies at the core of workaholism. In other words, it is the strong inner drive – or the addiction component – that distinguishes ‘good’ from ‘bad’ workaholism and not the hard work per se. This agrees with Porter (1996), who argues that, in essence, workaholism is an addiction. She defines workaholism as ‘excessive involvement with work evidenced by neglect in other areas of life and based on internal motives of behavior maintenance rather than requirements of the job or organization’ (p. 71). So it seems that, indeed, with our operationalization of workaholism we returned to the origin of the concept: workaholism as work addiction.

In testing the factorial validity of both workaholism scales it appeared that two items loaded on the ‘wrong’ factor; instead of loading on Working Excessively, they loaded on Working Compulsively. Inspection of both items revealed that these were the only items that did *not* refer to working excessively hard, but referred to the inability to relax and to feeling guilty when not working, respectively. Thus, rather than being typical for working excessively, both items reflect the compulsive component of workaholism. It is interesting to note that originally five of the nine items of the Working Excessively scale were supposed to constitute a scale dubbed ‘Overdoing’, and that both wrongly loading items were supposed to be part of *another* scale labeled ‘Self-worth’ (Robinson and Post, 1994). So it seems that our relabeling, as well as our findings from the factor analyses, are in line with the original sub-scale structure of the WART.

In sum, our findings show that both workaholism scales – reflecting working excessively and working compulsively – are highly interrelated and can be discriminated from work engagement. Although at first glance two workaholism items loaded on the ‘wrong’ factor, subsequent inspection of their content showed that they had been misplaced. Finally, it appeared

that working excessively was positively related to work engagement, indicating that working hard is characteristic of 'good' as well as for 'bad' workaholism. In contrast, working compulsively is *not* related to work engagement, indicating that it is typical for 'bad' workaholism.

### **Relationships with overwork (*Hypothesis 2*)**

As expected (*Hypothesis 2*), working at weekends, taking work home, and working longer than one's regular contractual work hours is more strongly positively associated with the excess work component of workaholism than with its compulsive component. In fact, this result underscores the conceptual validity of the work excess component, because working excessively implies working more hours (outside the workplace). It is important to note that the positive correlations cannot be explained by item overlap, because none of the work excess items refers to working at weekends or taking work home, and only one item refers to making long work hours: 'I find myself continuing working after my co-workers have called it quits'. In fact, rather than working extra hours the Working Excessively scale reflects being busy and working hard at work; for instance, by racing against the clock, doing more things at one time, and keeping many irons in the fire. The positive correlations of the three indicators of overwork with both workaholism components concur with the prevailing view that workaholics work 'any time and anywhere' (McMillan et al., 2001, p. 71). If anything, students of workaholism agree that workaholics work, or think about work, in any circumstances. This is illustrated by Scott et al. (1997, p. 292), who concluded after their thorough review of the literature: 'Our analysis, like that of Spence and Robbins (1992), revealed clearly that the amount of time spent in work was the critical defining feature of workaholism.' However, our results indicate that engaged workers also often take work home, work at weekends and perform overwork. On balance, the size of the correlation is similar to that of the compulsive component. Using a large representative sample of the Dutch workforce, Beckers et al. (2004) found a comparable positive correlation between (self-reported) overwork and work engagement ( $r = .21$ ). So, rather than being specific for workaholism in general, overwork seems to be related to the particular aspect of excess work, whilst 'good' workaholics – those who are engaged – also work beyond what is required by the job or by the organization.

### **Relationships with employee well-being (*Hypothesis 3*)**

Although *Hypothesis 3*, which stated that workaholism is negatively related to employee well-being and work engagement is positively related to well-being, was largely confirmed, not *all* relationships were significant (see Figure 9.1). For instance, working excessively was only (weakly) negatively

related to perceived health and neither to absenteeism nor to happiness. The fact that hard work is related to poor perceived health agrees with previous research that showed that working excessively long hours is associated with elevated levels of strain and ill health (for a review, see Van der Hulst, 2003). The second component of workaholism – working compulsively – is (more strongly) negatively related to perceived health and happiness. This is in line with observations from other studies that suggest that a strong inner drive may be the harmful element of workaholism (McMillan et al., 2001; McMillan and O’Driscoll, 2004). It can be speculated that, contrary to working compulsively, working excessively leads to rewards such as pay, recognition, career advancement and esteem (Peiperl and Jones, 2001) that may buffer negative effects on employee health and well-being.

Furthermore, it is interesting to note that *neither* working excessively *nor* working compulsively is significantly related to sickness absenteeism. Despite their high job involvement (Mudrack, 2004) and their strong work ethic (Porter, 2004), workaholics do *not* seem to be less absent from work than their less addicted colleagues. Conversely, engaged employees report fewer sickness absence days, and also better health and more happiness, than those who are less engaged. Generally speaking, compared with workaholism, relationships of engagement with well-being outcomes are also stronger. In sum, particularly working compulsively seems to be ‘bad’ for employees’ well-being, whereas work engagement seems to be ‘good’ for employees’ well-being.

#### **Relationships with employee performance (*Hypothesis 4*)**

Contrary to expectations (*Hypothesis 4*), instead of negatively workaholism was *positively* related to performance – at least as far as extra-role performance and innovativeness were concerned (see Figure 9.2). The fact that both workaholism components are positively related to extra-role performance but unrelated to in-role performance suggests that workaholics go beyond their job description. According to most authors, working beyond what is reasonably required by the job or by the organization is a hallmark of workaholism (Scott et al., 1997). And this is exactly what extra-role performance is all about: going the extra mile (Morrison, 1994). Innovativeness – by the way – may be considered a special type of extra-role performance because, for instance, inventing original solutions for work problems is usually not included in the employee’s job description. In-role performance, on the other hand, refers to activities strictly required on the job and includes meeting organizational objectives and effective functioning (Behrman and Perreault, 1982). Obviously, contrary to ‘extraordinary’ extra-role performance, working excessively and working compulsively are not related to ‘ordinary’ in-role performance. An alternative

explanation why workaholism is positively instead of negatively related to performance might be that we assessed *self-reported* performance. It cannot be ruled out that performance as assessed by colleagues, supervisors or company records would show the expected pattern, as by their very nature workaholics see themselves as driven, hard-working, successful and well-performing employees.

*Hypothesis 4* is supported as far as work engagement is concerned – it is positively and significantly associated with all three performance indicators. As in the case of employee well-being, relationships with work engagement are stronger than with workaholism. In sum, both workaholism and work engagement seem to be ‘good’ for employees’ performance, albeit that for workaholism this only applies for extra-role performance and not for in-role performance.

### **Limitations and suggestions for further research**

All data in the current study are based on self-reports, which means that the magnitude of the effects that we reported may have been biased, owing to common method variance or the wish to answer consistently (Conway, 2002). Unfortunately, we cannot test the strength of this type of bias but several studies (for example, Semmer et al., 1996) have indicated that common method variance is not as troublesome as one might expect in studies such as the current one. Nevertheless, we believe that future research could greatly benefit from including more objectively measured variables, such as company records, for measuring absenteeism rates and work performance.

Another potential limitation is the nature of the sample, which was somewhat biased; compared with the Dutch workforce, slightly more men (6 per cent) and much more highly-educated employees (27 per cent) were included. Despite the popular belief that workaholism is particularly prevalent among those with higher occupational or educational levels, this is not supported by empirical evidence (Buelens and Poelmans, 2004; Snir and Harpaz, 2004). The same applies for age and gender but, compared with salaried employees, the self-employed have higher levels of workaholism (Snir and Harpaz, 2004). Fortunately our sample was representative for the Dutch workforce as far as type of employment is concerned (see Table 9.1). Hence, it seems unlikely that our results are distorted by sample bias.

Another limitation is the cross-sectional nature of our study that precludes cause–effect relationships from being uncovered. For at least two reasons, longitudinal research is important when it comes to discriminating workaholism from work engagement. First, both may be causally linked. For instance, one could speculate that work engagement might develop into workaholism when the employee becomes more and more ‘drawn into’ work, whereas the reverse – a workaholic stepping back from work – seems much

less likely. Second, employee well-being and performance may be distinctively causally related to workaholism and work engagement. For instance, work engagement and well-being might be reciprocally related in such a way that an upward gain-spiral develops, resulting in higher engagement and greater well-being (Llorens et al., forthcoming). On the other hand, it can be speculated that the opposite might occur for workaholism (particularly working compulsively): the harder the employee works, the more his or her well-being is corroded and the more the capacity to work hard is undermined – a downward loss-spiral. Not surprisingly, it has been suggested that workaholism might lead to burnout (Maslach, 1986). However, this assumption still remains to be tested using a longitudinal design.

A unique feature of the current study was the use of the Internet as a research tool, which can be considered a weakness and strength. On the negative side, Internet surveys usually attract participants of higher socioeconomic and educational status (Smith and Leigh, 1997) and thus suffer from selection bias. As we have seen, this is also the case in our study but it is not very likely that this has greatly influenced our results. On the positive side, the present research includes employees from a wide range of occupations and employment sectors, ranging from industry (6 per cent), commerce (7 per cent) and transportation (7 per cent) to education (12 per cent) and health care (23 per cent). The majority of the sample work with people (71 per cent), while the remaining employees work with data (22 per cent) or with things (7 per cent). Using traditional sampling techniques, it would have been very difficult to obtain such a large and heterogeneous sample.

### **Final remark**

Our study suggests that ‘bad’ workaholism can be distinguished from ‘good’ workaholism. The latter was operationalized as work engagement because the description in the literature of ‘good’ workaholism comes very close to how this recently emerged concept is described. Overall, it seems that working excessively but particularly working compulsively is ‘bad’ for employees’ well-being. However, in terms of self-reported performance, workaholism seems to be ‘good’. Work engagement, on the other hand, is related much more strongly and positively to *all* indicators of employee well-being and performance. So, despite the fact that, like workaholics, engaged employees work hard, their work involvement is ‘good’.

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