

# Four Types of Well-being among Entrepreneurs and Their Relationships with Business Performance

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## Abstract

Four types of affective well-being were investigated in a sample of 135 Dutch entrepreneurs: work engagement, job satisfaction, exhaustion and workaholism. Compared to employees, entrepreneurs score extremely high on work engagement. Scores on job satisfaction, exhaustion and working compulsively (CW) are also higher. Scores on working excessively (EW) are lower. When investigating the overlap between the four types of well-being, results were found to vary with the approach chosen. When analysing correlations, overlap appears especially high between workaholism and exhaustion. When analysing cases identified as high scorers, overlap is especially evident between entrepreneurs high on both work engagement and job satisfaction. A final issue studied concerned the relation between well-being and performance.

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Entrepreneurs scoring high on EW reported the highest turnover, profits and number of employees. Satisfied entrepreneurs also reported relatively high profits and number of employees. Implications of these findings for trainers and researchers interested in well-being and performance in entrepreneurs are discussed.

### **Keywords**

Entrepreneurship, entrepreneurialism, entrepreneurial well-being, entrepreneurial success, business performance

There is growing academic interest in the topic of subjective well-being (SWB) (e.g., Diener, 1994, 2000). Among the factors influencing SWB, employment stands out (Frey, 2008). Persons who are unemployed experience much less happiness than other persons, even when other influences such as lower income are controlled for (Benz & Frey, 2008; Frey, 2008). Looking at differences between the self-employed and the employed, several studies clearly show that the self-employed are more satisfied with their work than employees (Andersson, 2008; Benz & Frey, 2003, 2004, 2008; Blanchflower & Oswald, 1998; Bradley & Roberts, 2004; Hundley, 2001; Tetrick et al., 2000). Besides a high evaluation of job satisfaction, entrepreneurs also score higher on life satisfaction (Andersson, 2008). Besides being satisfied with their life and work, feeling engaged is another positive dimension of well-being (e.g., Bakker et al., 2008), and there too, entrepreneurs score higher in comparison to employees (Gorgievski, Bakker & Schaufeli, 2010; Smulders, 2006). This study further explores how the scores on different types of work-related affective well-being in entrepreneurs relate to those in employees.

Feeling well and being happy are linked to achieving better performance in one's work (e.g., Judge et al., 2001; Locke & Latham, 1990; Lyubomirsky, King & Diener, 2005). This relationship among employees has been studied extensively, but to a far lesser extent among entrepreneurs. To investigate this relationship, this study links different types of work-related affective well-being to entrepreneurial performance.

To be able to answer this research question, the study of Bakker and Oerlemans (2011) is used as a theoretical framework. They integrated four types of work-related affective well-being in the circumplex model of affective well-being (Feldman Barrett & Russell, 1999; Russell, 1979, 1980, 2003; Warr, 1990; Warr et al., 2014; Watson & Tellegen, 1985). Two of the four dimensions are positive types, that is, job satisfaction

and work engagement, and the other two are the negative types, that is, workaholism and exhaustion. Work engagement and job satisfaction are different concepts. Engagement combines work pleasure (dedication) with high activation (vigour and absorption) (Bakker, Albrecht & Leiter, 2011; Bakker & Hakanen, 2013). Job satisfaction is typically a more passive form of well-being (Bakker & Hakanen, 2013). In their high activation levels and working hard, engaged workers seem to equal workaholics, but work engagement and workaholism have been confirmed to be independent constructs (Mäkikangas et al., 2013; Van Beek, Taris & Schaufeli, 2011). Engaged workers do not work compulsively the way workaholics do, and they rather consider work to be fun (Schaufeli et al., 2001). Workaholism is a combination of working excessively (EW) and working compulsively (CW) (McMillan & O'Driscoll, 2006; Taris & Schaufeli, 2003). There is a potentially serious side effect of workaholism: exhaustion. Exhaustion reflects the stress dimension of burnout (Bakker, Demerouti & Verbeke, 2004; Maslach, Schaufeli & Leiter, 2001; Wincent & Örtqvist, 2009a), and is defined as 'a chronic state of physical and emotional depletion that results from excessive job demands and continuous hassles' (Wright & Cropanzano, 1998, p. 486). Research among entrepreneurs shows high overall exhaustion and stress levels (Boyd & Gumpert, 1983; Buttner, 1992; Dijkhuizen et al., 2014; Harris, Saltstone & Fraboni, 1999; Wincent & Örtqvist, 2009b).

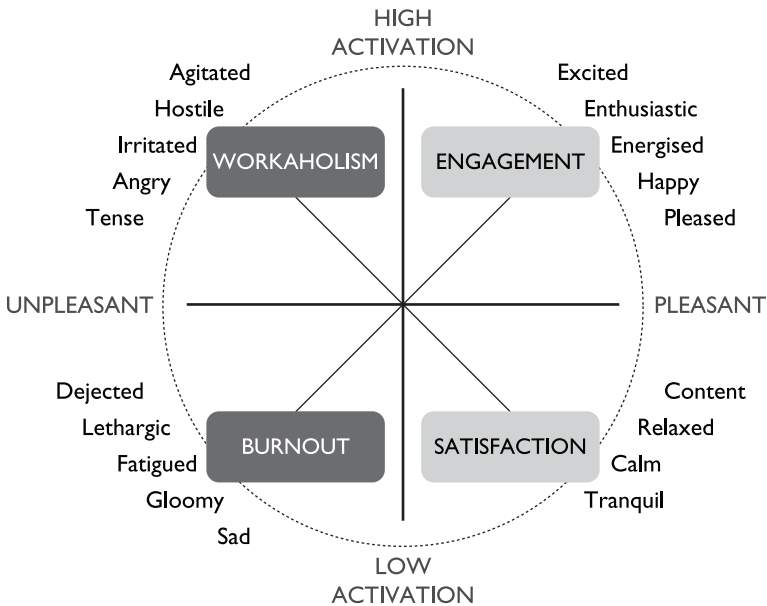
These four types of well-being are represented by Bakker and Oerlemans (2011) in the circumplex model on two dimensions: activation and pleasure (Russell, 1980, 2003; Russell & Carroll, 1999; Russell & Feldman Barrett, 1999). One of the axes runs from pleasure, positive emotions such as feeling happy and calm, to displeasure, for example, emotions such as feeling tense and sad (Bakker & Oerlemans, 2011; Russell, 1980, 2003). Job satisfaction and work engagement are both on the pleasure side of the circumplex. On the displeasure side, we find workaholism and exhaustion. The activation dimension indicates high and low activation, varying according to the experience of emotions. A high level of activation is feeling energised and excited, while a low level is feeling relaxed and fatigued. Opposites can be found between workaholism and job satisfaction, confirmed by the research of Taris, Schaufeli and Shimazu (2009), and between work engagement and exhaustion, which is also confirmed in a previous study (González-Roma et al., 2006). Using an integrative circumplex model that includes the constructs of affective well-being and relates them to each other provides more insights into the interrelationships (Bakker & Oerlemans,

2011; Russell, 1980, 2003; Russell & Carroll, 1999; Van Katwyk et al., 2000). These interrelationships are further explored in this study.

There is broad acceptance of Russell's circumplex model of affect, despite its limitations (Burke et al., 1989; Mäkikangas, Feldt & Kinnunen, 2007; Remington, Fabrigar & Visser, 2000; Van Katwyk et al., 2000). One of the limitations mentioned is the two-dimensional representation which could lead to a lack of differences among emotions. Emotions that are positioned close in the circle, such as fear and anger, seem quite similar, because of their position in the circumplex, but are in fact very different (Larsen & Diener, 1992; Remington et al., 2000). Empirical evidence also supports Warr's (1987) assertion that job-related affective well-being is two-dimensional, including four interrelated factors (Mäkikangas et al., 2007; Van Katwyk et al., 2000). This study takes the four types of work-related affective well-being of Bakker and Oerlemans (2011) as typologies for entrepreneurs and links the different types to business performance. There are studies available on the separate four types of work-related affective well-being among entrepreneurs, but not on the four types in one model, and their (inter)relationships with business performance. This study further investigates not just the interrelationships of the dimensions, but the relationship with business performance as well.

This study contributes in several ways to prior literature. First, the study contributes to the understanding of work-related affective well-being among entrepreneurs. Validated scales are being used to investigate the four types of work-related affective well-being according to the earlier research of Bakker and Oerlemans (2011). Second, we are able to compare the scores of entrepreneurs with the norms of employees and see whether the two occupational groups differ. Furthermore, we are able to see how entrepreneurs are ranked on the four concepts, providing insight into whether entrepreneurs fall into one or more of the four types. The link from the different well-being types to business performance is made. If we know which well-being type(s) of entrepreneur achieves the best business results, entrepreneurs, policymakers, business training centres and business mentors have a better idea of which psychological constructs to focus on in their policies and programmes. Knowing how to achieve the best business results is not just positive for entrepreneurs, but for the economy at large as well, because of the contribution of entrepreneurship to the creation of jobs and wealth.

Entrepreneurs have a very high level of engagement and are more engaged than employees in executing their activities (Gorgievski et al., 2010; Smulders, 2006). Two studies comparing employees and entrepreneurs made it evident that work engagement is related positively to



**Figure 1.** A Two-dimensional View of Work-related SWB (cf., Bakker & Oerlemans, 2011)

**Source:** Authors' own.

business performance (Gorgievski & Bakker, 2010; Gorgievski Moriano & Bakker, 2014). Engaged business owners are more successful. On the pleasure side of the circumplex model (Figure 1), we also find job satisfaction, and previous research has shown that entrepreneurs are more satisfied with their work than employees (Andersson, 2008; Benz & Frey, 2003, 2004, 2008; Blanchflower & Oswald, 1998; Bradley & Roberts, 2004; Hundley, 2001; Tetrick et al., 2000). The positive relationship with business success is confirmed in a recent study among entrepreneurs of Dej (2011).

With respect to workaholism, a study showed that self-employed scored higher than employees on EW, but not on CW (Gorgievski et al., 2010). Another study by Gorgievski et al. (2014) found a negative relation with performance, implying that workaholic entrepreneurs are less successful than their non-workaholic colleagues. Workaholism in this study relates to more negative, and less positive affect. On the displeasure side of the circumplex, we also find exhaustion (Bakker & Oerlemans, 2011; Russell, 1980, 2003; Russell & Carroll, 1999). Research has shown that business owners experience high overall exhaustion and high

stress levels (Boyd & Gumpert, 1983; Buttner, 1992; Harris et al., 1999; Wincent & Örtqvist, 2009b). Entrepreneurs experience a demanding environment, a heavy workload, a lot of responsibility with risk involved and there is a lot of complexity to deal with in their work, which leads to exhaustion (Dijkhuizen, Gorgievski, Van Veldhoven & Schalk, 2016). Additional literature shows that, in turn, exhaustion leads to lower business performance (Buttner, 1992; Wincent & Örtqvist, 2009a, 2009b).

So far, we have introduced four constructs of work-related affective well-being for entrepreneurs. On all of these concepts, entrepreneurs are likely to score high, and in most cases higher than employed workers, leading to the first explorative research question:

*Research question 1: How do the scores on the four types of work-related affective well-being in entrepreneurs relate to those scores in employees?*

In the first research question, the four dimensions of work-related affective well-being are examined separately. The next step is to investigate the interrelationships among the different concepts (Russell, 1980, 2003; Russell & Carroll, 1999; Van Katwyk et al., 2000), leading to the second research question:

*Research question 2: How do the four dimensions of work-related affective well-being interrelate?*

We expect positive associations between the two concepts related to high pleasure: work engagement and job satisfaction, and the two concepts that are associated with high activation: workaholism and work engagement.

*Hypothesis 1: Work engagement and job satisfaction are positively associated among entrepreneurs.*

*Hypothesis 2: Work engagement and workaholism are positively associated among entrepreneurs.*

In the circumplex, opposites can be found between workaholism and job satisfaction (Taris et al., 2009) and between work engagement and exhaustion (González-Roma et al., 2006). At a certain moment, a person cannot feel like a workaholic, with emotions such as agitation and irritation, and feel satisfied, with emotions such as contentment and calmness (Russell, 1980, 2003). This leads to the following hypotheses:

*Hypothesis 3: Workaholism and job satisfaction are negatively associated among entrepreneurs.*

*Hypothesis 4: Work engagement and exhaustion are negatively associated among entrepreneurs.*

The scores of the four types of well-being (*Research question 1*), the associations between the constructs (*Hypothesis 1* and *Hypothesis 2*) and the associations of the two poles in the circumplex model (*Hypothesis 3* and *Hypothesis 4*) provide information about whether entrepreneurs fit into a certain quadrant of the circumplex model (Bakker & Oerlemans, 2011). As people do not feel workaholic, exhausted, satisfied and engaged at the same time, according to the model, we assume that although entrepreneurs score high on all four types of work-related affective well-being, they might fit into one of the quadrants as a person typology. We assume the following research question:

*Research question 3: Are the four types of work-related affective well-being unique to entrepreneurs, or do the four types overlap?*

Knowing which work-related affective well-being types are present among entrepreneurs and how they associate leads us to the next research question. We want to examine which type of work-related affective well-being is related to the best business performance. If we know which type is most successful, business consultants or mentors can assist entrepreneurs to develop the personal skills that fit the characteristics of this type. Previous research among entrepreneurs found different relationships between the four types of well-being separately and entrepreneurial performance. Between work engagement and business performance, a positive relationship is found (Gorgievski & Bakker, 2010; Gorgievski et al., 2014). A positive correlation is also found between job satisfaction and business performance (Dej, 2011). Negative relationships are found with performance and workaholicism (Gorgievski et al., 2014), and exhaustion (Dijkhuizen et al., 2016). These studies investigated separate well-being types and their relationship with business performance. In this study, we want to know which type of work-related affective well-being, or which combination of types, is associated with the best business performance. We therefore formulate the final research question:

*Research question 4: Which type of work-related affective well-being or which combination of types relates to the best business performance?*

## Methodology

### *Procedure and Participants*

In a previous study among entrepreneurs (Dijkhuizen et al., 2016), the respondents could choose whether or not to participate in future studies. A total of 248 business owners signed up as future respondents. Of these

invited 248 entrepreneurs, a total of 135 respondents filled in an online questionnaire in the first quarter of 2014 (response rate of 54 per cent). These respondents were individuals who founded or owned a private company (older than 1 year), employing less than 250 people in The Netherlands. This is in line with the European Commission that defines small- and medium-sized enterprises as companies employing less than 250 people. In the demarcation of entrepreneurs, we follow the definition by Van Praag and Versloot (2007), that is, 'individuals who have started up a business or who own a business, i.e., who are self-employed or the owner-manager of an incorporated business, as entrepreneurs too'. Companies were founded less than 3 years ago (4.4 per cent), 21.5 per cent was existing between 3 and 5 years, 39.3 per cent between 6 and 10 years and more than 10 years ago was 34.8 per cent. Respondents were active in various branches of industry (e.g., service industry, information and communication and health services) and mainly on a national scale (46.7 per cent). Most of the respondents held a bachelor or master degree (84.4 per cent). Weekly hours spent as an entrepreneur averaged 42.31 hours.

## Measures

The four constructs of work-related affective well-being are measured with one validated, widely accepted scale per concept.

### *Workaholism*

The 10-item two-dimensional version of the Dutch Workaholism Scale (DUWAS; Del Líbano, Llorens, Salanova & Schaufeli, 2010; Schaufeli, Van Wijhe, Peeters & Taris, 2011) is used with items scored on a four-point scale (1 = 'never'; 4 = 'always'). The two subscales include 'working excessively' and 'working compulsively'. An example item for EW is 'I seem to be in a hurry and racing against the clock'. An example of CW is 'It's important to me to work hard even when I don't enjoy what I'm doing'. In this study, Cronbach's alpha for EW was 0.76 and for CW 0.72.

### *Exhaustion*

Exhaustion was measured by the validated six-item scale of *need for recovery* (Van Veldhoven et al., 2002; Van Veldhoven et al., 2014), for example, 'I find it difficult to relax at the end of a working day'. The

items were answered on a four-point scale with 0 = *never*, 1 = *sometimes*, 2 = *often* and 3 = *always*. For this scale, Cronbach's alpha was 0.88.

### *Engagement*

Work engagement was measured with the nine-item version of the Dutch Utrecht Work Engagement Scale (UWES; Schaufeli & Bakker, 2003). The items are answered on a seven-point scale, 1 = *never* to 7 = *daily*. An example item is 'I am enthusiastic about my job'. The Cronbach's alpha in this study was 0.89.

### *Satisfaction*

Satisfaction was measured by the adapted version of the Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen & Griffin, 1985; Diener, Inglehart & Tay, 2012). The SWLS items are global in nature, and were adapted for inclusion in our study, to be formulated directly in relation to satisfaction with entrepreneurship. This is a five-point scale with 1 = *totally disagree* to 5 = *totally agree*. An example item is 'I am satisfied with my entrepreneurial life'. In this study, the Cronbach's alpha was 0.88.

### *Business Performance*

Business performance was measured by self-reported turnover, profit and number of employees (Cooper, Gimeno-Gascon & Woo, 1994; Van Praag & Versloot, 2007) over the year 2013.

## **Results**

To investigate *Research question 1*, the scores of the entrepreneurs on the four dimensions of work-related affective well-being were compared with the statistical norm scores for employees. Manuals and empirical studies on the scales provided access to the statistical norms. For all measures we were able to find information on the 75th percentile scores in large samples. For workaholism, the 75th percentile is taken into account for EW and CW separately. We used the statistical norms from Schaufeli et al. (2011), based on a sample of  $N = 11,060$ . The norms of work engagement come from the manual of the UWES (Schaufeli & Bakker, 2003) with a sample of 9,679 people for the shortened version of UWES that was used in this study. For job satisfaction, we used a study on the SWLS (Diener et al., 1985) with 176 respondents. For the exhaustion scale of Van Veldhoven et al. (2002), statistical data of 20,877

**Table 1.** Number of Entrepreneurs Scoring Higher than Employees on Dimensions of Work-related Affective Well-being

Workaholism	Work Engagement
EW: 20 above 75 percentile (14.8%) CW: 41 above 75 percentile (30.4%)	116 above 75 percentile (86.0%)
Exhaustion	Job Satisfaction
59 above 75 percentile (43.7%)	51 above 75 percentile (37.8%)

**Source:** Authors' own.

respondents were available. Besides the availability of information on the 75th percentile, another reason for using the 75th percentile was that taking, for example, the 95th percentile would give smaller numbers and would make comparisons more difficult. It is important to have enough cases for comparison in the different quadrants. As the sample size of 135 respondents is rather small, we chose to have a minimum of 15 cases per cell. Next, we compared the statistical norms for employees to the data from this study among entrepreneurs (Table 1).

On *workaholism*, 20 respondents (14.8 per cent) scored higher than the 75th percentile of 2.91 (Schaufeli et al., 2011) on EW. On CW, 41 respondents (30.4 per cent) scored higher than the 75th percentile of 2.41 (Schaufeli et al., 2011). On *work engagement*, the 75th percentile is 4.67 of the shortened version of the Dutch UWES (Schaufeli & Bakker, 2003). In the sample group, 116 respondents (86.0 per cent) scored higher. On the quadrant of *job satisfaction*, 51 respondents (37.8 per cent) scored higher than the 75th percentile of 26 (Diener et al., 1985, 2012). On the construct of satisfaction, the statistical norms of the SWLS of Diener (Diener et al., 1985) are compared to the adapted version of satisfaction with entrepreneurship used in this study. A total of 59 respondents (43.7 per cent) scored higher than the 75th percentile of 1.00 (Van Veldhoven et al., 2002) on *exhaustion*.

The entrepreneurs in our sample show very high scores on work engagement, and relatively high scores on exhaustion and job satisfaction, with lower scores on CW and EW. *Research question 1* is herewith investigated and we can conclude that entrepreneurs score higher than the statistical norm for employees on three of the four types of work-related affective well-being.

Besides examining the four dimensions of work-related affective well-being separately, we are interested in the interrelationships, exploring *Research question 2*. We use a correlation matrix to study the associations between the different dimensions (Table 2).

**Table 2.** Means, Standard Deviations, Alpha Reliability Coefficient and Correlation Coefficients (N = 135)

	<i>M</i>		<i>SD</i>		1	2	3	4
1. EW	2.22	0.60	(0.76)					
2. CW	2.15	0.66	0.74**		(0.72)			
3. Work engagement	5.21	0.76	-0.19**		-0.27**	(0.89)		
4. Exhaustion		0.89	0.55		0.60**	0.51**	-0.38**	(0.88)
5. Job satisfaction	3.39	0.85	-0.30**		-0.29**	0.35**	-0.28**	(0.88)

**Source:** Authors' own.

**Note:** \*\* Correlation is significant at 0.01 level (two-tailed).

Correlations show that the four constructs are strongly related. This is in line with previous research among employees (Schaufeli et al., 2009; Schaufeli, Taris & Van Rhenen, 2008). All the relations in the two-dimensional model are significant at 0.01 level (two-tailed), with strong correlations existing between workaholism (both EW and CW) and exhaustion (0.60\*\* and 0.51\*\*, respectively), which was expected from previous studies (Schaufeli et al., 2009; Taris et al., 2009). Furthermore, relatively high correlations were found between workaholism and satisfaction (−0.30\*\* for EW and −0.29\*\* for CW), in line with Taris et al. (2009). The high correlation between engagement and satisfaction (0.35\*\*) is in line with the findings of Schaufeli et al. (2001) and confirms *Hypothesis 1*; work engagement and job satisfaction are positively associated among entrepreneurs.

As suggested in *Hypothesis 2*, work engagement and workaholism (EW and CW) are indeed associated with a correlation of −0.19\*\* and −0.27\*\*, but negatively instead of positively, thus rejecting *Hypothesis 2*. However, other relationships of workaholism with job satisfaction and exhaustion are stronger.

The association of workaholism and job satisfaction was hypothesised to be negative, as they are two poles in the circumplex model. Table 2 indeed shows a negative relationship (−0.30\*\* and −0.29\*\*) between the two dimensions, thus confirming *Hypothesis 3*. The other pole in the circumplex model is the relationship between work engagement and exhaustion, and from Table 2 we can learn that this is the case among entrepreneurs (−0.38\*\*). We therewith confirm *Hypothesis 4*.

To be able to study whether the four types of work-related affective well-being are unique for entrepreneurs or whether the types overlap (*Research question 3*), we first examine the scores of entrepreneurs on the separate dimensions from Table 1 again. Entrepreneurs score higher than employees on the statistical norms of three of the four types of work-related affective well-being; therefore, there seems to be an overlap of affective well-being dimensions. The overlap between the two types on the pleasure side, work engagement and job satisfaction, is 48 respondents (35.6 per cent) (Table 4). The overlap between the two constructs on the high activation side, work engagement and workaholism, is 16 (11.9 per cent) for EW and 29 (21.5 per cent) for CW. Both from the high scores of entrepreneurs compared to employees on the separate dimensions (Table 1) and the overlap in Table 4, we assume that entrepreneurs' work-related affective well-being cannot be matched in one single quadrant of the circumplex model. We therefore conclude on *Research question 3* that the four types of work-related affective well-being in entrepreneurs overlap.

**Table 3.** Entrepreneurs Scoring above Statistical Norms on Separate Dimensions of Work-related Affective Well-being, and Their Average Turnover, Profit and Number of Employees

	Mean Number	Mean Turnover	Mean Profit	No. of Employees
Total group	135	3.27	2.19	8.98
#classified as EW	20	4.25	2.65	15.70
#classified as CW	41	3.61	2.27	8.20
#classified as working engaged	116	3.34	2.29	9.46
#classified as exhausted	59	3.53	2.12	8.17
#classified as job satisfied	51	3.65	2.59	14.98

**Source:** Authors' own.

The next step in our study was to investigate the relationships between the four types of work-related affective well-being on the one hand and business performance on the other hand (*Research question 4*). Business performance was measured in terms of turnover, profit and number of employees over the year 2013. For the total group of respondents ( $N = 135$ ), the turnover ( $M = 3.27$ ), profit ( $M = 2.19$ ) and number of employees ( $M = 8.98$ ) were calculated (Table 3). The second step was to measure the performance of the entrepreneurs scoring higher than the 75th percentile on the four types of work-related affective well-being. In Table 3, we see that all high-scoring entrepreneurs in each of the groups perform better than the whole group ( $N = 135$ ) in terms of 'turnover', but not in terms of 'profit' and 'number of employees'.

Independent-samples *t*-tests were conducted to compare the business performance of the group of entrepreneurs scoring above the statistical norm of the four types of work-related affective well-being to the entrepreneurs scoring below the norm. We found a significant difference in EW and turnover (below norm  $M = 3.10$ ,  $SD = 1.79$ ; above norm  $M = 4.25$ ,  $SD = 2.29$ ;  $t(133) = -2.530$ ,  $p = 0.01$ ), but no significant difference in profit (below norm  $M = 2.11$ ,  $SD = 1.44$ ; above norm  $M = 2.65$ ,  $SD = 1.46$ ;  $t(133) = -1.538$ ,  $p = 0.13$ ) and number of employees (below norm  $M = 7.81$ ,  $SD = 44.37$ ; above norm  $M = 15.70$ ,  $SD = 27.69$ ;  $t(133) = -0.768$ ,  $p = 0.44$ ). On CW, we did not find a significant difference in turnover (below norm  $M = 3.13$ ,  $SD = 1.82$ ; above norm  $M = 3.61$ ,  $SD = 2.08$ ;  $t(133) = -1.356$ ,  $p = 0.18$ ), profit (below norm  $M = 2.16$ ,

SD = 1.48; above norm  $M = 2.27$ , SD = 1.38;  $t(133) = -0.400$ ,  $p = 0.69$ ) and number of employees (below norm  $M = 9.32$ , SD = 49.74; above norm  $M = 8.20$ , SD = 15.75;  $t(133) = 0.141$ ,  $p = 0.89$ ). On work engagement, we found no significant difference in turnover (below norm  $M = 2.84$ , SD = 2.24; above norm  $M = 3.34$ , SD = 1.85;  $t(133) = -1.066$ ,  $p = 0.29$ ) and number of employees (below norm  $M = 6.06$ , SD = 11.10; above norm  $M = 9.46$ , SD = 45.46;  $t(133) = -0.324$ ,  $p = 0.75$ ), but a significant difference in profit (below norm  $M = 1.58$ , SD = 0.90; above norm  $M = 2.29$ , SD = 1.50;  $t(133) = -2.015$ ,  $p = 0.05$ ). On exhaustion, there is no significant difference in turnover (below norm  $M = 3.08$ , SD = 1.91; above norm  $M = 3.53$ , SD = 1.89;  $t(133) = -1.354$ ,  $p = 0.18$ ), profit (below norm  $M = 2.25$ , SD = 1.44; above norm  $M = 2.12$ , SD = 1.46;  $t(133) = 0.521$ ,  $p = 0.60$ ) and number of employees (below norm  $M = 9.61$ , SD = 54.22; above norm  $M = 8.17$ , SD = 18.33;  $t(133) = 0.195$ ,  $p = 0.85$ ). On job satisfaction, there is no significant difference in turnover (below norm  $M = 3.05$ , SD = 1.96; above norm  $M = 3.65$ , SD = 1.76;  $t(133) = -1.786$ ,  $p = 0.08$ ) and number of employees (below norm  $M = 5.33$ , SD = 11.90; above norm  $M = 14.98$ , SD = 67.14;  $t(133) = -1.017$ ,  $p = 0.31$ ), but significant in profit (below norm  $M = 1.95$ , SD = 1.31; above norm  $M = 2.59$ , SD = 1.59;  $t(133) = -2.523$ ,  $p = 0.01$ ). From the  $t$ -tests, we can conclude that entrepreneurs scoring above the statistical norm for EW score significantly higher on turnover. Being engaged and satisfied above the norm gives significantly higher scores on profit, partially answering *Research question 4*.

Besides, studying the performance of the different types of work-related affective well-being separately, the final step is to examine whether a combination of types is associated with an even better performance. For example, if being engaged and exhausted are related to a higher performance than only being engaged or exhausted. In Table 4, the different combinations are indicated with the number of respondents scoring above the 75th percentile on both indicated types. For these groups of respondents with both dimensions, the business success indicators are calculated. We observe that the business performance are even higher when the entrepreneur is not only EW (Table 2), but is also satisfied. The highest score on turnover and profit is found in excessively working and engaged entrepreneurs ( $N = 16$ ). This 'double type' gives the entrepreneur more turnover and profit than if he or she would only work excessively or be engaged (Table 3).

Both these types are on the high activation side, so entrepreneurs feeling either positively or negatively energised have a higher turnover and profit. The entrepreneur with the (second) largest number of employees

**Table 4.** Entrepreneurs Scoring above Statistical Norms on Two Dimensions of Work-related Affective Well-being, and Their Average Turnover, Profit and Number of Employees

	N	Mean Turnover	Mean Profit	Mean No. of Employees
Total group	135	3.27	2.19	8.98
# classified as excessively working AND work engaged	16	4.31	2.88	16.19
# classified as compulsively working AND work engaged	29	3.72	2.59	8.00
# classified as excessively working AND exhausted	17	4.06	2.47	17.59
# classified as compulsively working AND exhausted	30	3.80	2.20	9.03
# classified as excessively working AND job satisfied	4	4.75	3.50	25.00
# classified as compulsively working AND job satisfied	11	3.45	2.64	0.64
# classified as work engaged AND exhausted	46	3.61	2.30	8.22
# classified as work engaged AND job satisfied	48	3.71	2.63	15.92
# classified as exhausted AND job satisfied	16	3.75	2.75	9.88

**Source:** Authors' own.

is the excessively working and exhausted entrepreneur (Table 4). Both these types are on the unpleasant side of the circumplex. The lowest performance is found in compulsively working entrepreneurs who are also satisfied, or engaged or exhausted. Looking at only exhaustion, entrepreneurs score worst on profit and number of employees, and when combined with the other three types, scores are low, but the worst for the compulsively working entrepreneurs.

Independent-samples *t*-tests were conducted to compare the scores on turnover, profit and number of employees for the different groups in Table 4 (e.g., both EW and work engagement, above the statistical norms versus EW and/or being engaged below the statistical norms). There was a significant difference in EW combined with work engagement, in turnover (below norm  $M = 3.13$ ,  $SD = 1.85$ ; above norm  $M = 4.31$ ,

SD = 2.06;  $t(133) = -2.360$ ,  $p = 0.02$ ), and profit (below norm  $M = 2.10$ , SD = 1.43; above norm  $M = 2.88$ , SD = 1.41;  $t(133) = -2.031$ ,  $p = 0.04$ ), but no significant difference in number of employees (below norm  $M = 8.01$ , SD = 43.73; above norm  $M = 16.19$ , SD = 29.97;  $t(133) = -0.724$ ,  $p = 0.47$ ). On CW combined with work engagement, we did not find a significant difference in turnover (below norm  $M = 3.15$ , SD = 1.92; above norm  $M = 3.72$ , SD = 1.83;  $t(133) = -1.441$ ,  $p = 0.15$ ), profit (below norm  $M = 2.08$ , SD = 1.45; above norm  $M = 2.59$ , SD = 1.40;  $t(133) = -1.663$ ,  $p = 0.10$ ) and number of employees (below norm  $M = 9.25$ , SD = 47.01; above norm  $M = 8.00$ , SD = 16.89;  $t(133) = 0.140$ ,  $p = 0.89$ ). On EW combined with exhaustion, we also did not find significant differences in turnover (below norm  $M = 3.16$ , SD = 1.81; above norm  $M = 4.06$ , SD = 2.41;  $t(133) = -1.832$ ,  $p = 0.07$ ), profit (below norm  $M = 2.15$ , SD = 1.44; above norm  $M = 2.47$ , SD = 1.51;  $t(133) = -0.846$ ,  $p = 0.40$ ) and number of employees (below norm  $M = 7.74$ , SD = 43.81; above norm  $M = 17.59$ , SD = 29.70;  $t(133) = -0.896$ ,  $p = 0.37$ ). On CW combined with exhaustion, we did not find significant differences in turnover (below norm  $M = 3.12$ , SD = 1.83; above norm  $M = 3.80$ , SD = 2.09;  $t(133) = -1.726$ ,  $p = 0.09$ ), profit (below norm  $M = 2.19$ , SD = 1.50; above norm  $M = 2.20$ , SD = 1.27;  $t(133) = -0.032$ ,  $p = 0.98$ ) and number of employees (below norm  $M = 8.96$ , SD = 47.22; above norm  $M = 9.03$ , SD = 16.82;  $t(133) = -0.008$ ,  $p = 0.99$ ). On EW combined with job satisfaction, no significant differences were found, neither in turnover (below norm  $M = 3.23$ , SD = 1.89; above norm  $M = 4.75$ , SD = 2.22;  $t(133) = -1.581$ ,  $p = 0.12$ ), in profit (below norm  $M = 2.15$ , SD = 1.43; above norm  $M = 3.50$ , SD = 1.73;  $t(133) = -1.850$ ,  $p = 0.07$ ) nor in number of employees (below norm  $M = 8.49$ , SD = 42.20; above norm  $M = 25.00$ , SD = 50.00;  $t(133) = -0.767$ ,  $p = 0.44$ ). The combination of CW and job satisfaction shows the same lack of significant differences, in turnover (below norm  $M = 3.26$ , SD = 1.95; above norm  $M = 3.45$ , SD = 1.29;  $t(133) = -0.327$ ,  $p = 0.75$ ), profit (below norm  $M = 2.15$ , SD = 1.49; above norm  $M = 2.64$ , SD = 0.81;  $t(133) = -1.061$ ,  $p = 0.29$ ) and number of employees (below norm  $M = 9.72$ , SD = 44.10; above norm  $M = 0.64$ , SD = 1.50;  $t(133) = 0.681$ ,  $p = 0.50$ ). On work engagement combined with exhaustion, we did not find any significant differences either, neither in turnover (below norm  $M = 3.10$ , SD = 2.01; above norm  $M = 3.61$ , SD = 1.67;  $t(133) = -1.473$ ,  $p = 0.14$ ), profit (below norm  $M = 2.13$ , SD = 1.41; above norm  $M = 2.30$ , SD = 1.53;  $t(133) = -0.643$ ,  $p = 0.52$ ) nor in number of employees (below norm  $M = 9.37$ , SD = 50.29; above norm  $M = 8.22$ , SD = 19.71;  $t(133) = 0.150$ ,  $p = 0.88$ ).

On work engagement combined with job satisfaction, we found significant difference in turnover (below norm  $M = 3.03$ ,  $SD = 1.94$ ; above norm  $M = 3.71$ ,  $SD = 1.79$ ;  $t(133) = -1.988$ ,  $p = 0.05$ ) and on profit (below norm  $M = 1.95$ ,  $SD = 1.29$ ; above norm  $M = 2.63$ ,  $SD = 1.62$ ;  $t(133) = -2.634$ ,  $p = 0.01$ ), but not in number of employees (below norm  $M = 5.15$ ,  $SD = 11.73$ ; above norm  $M = 15.92$ ,  $SD = 69.14$ ;  $t(48.50) = -1.071$ ,  $p = 0.29$ ). On exhaustion combined with job satisfaction, we did not find significant differences in turnover (below norm  $M = 3.21$ ,  $SD = 1.95$ ; above norm  $M = 3.75$ ,  $SD = 1.48$ ;  $t(133) = -1.064$ ,  $p = 0.29$ ), profit (below norm  $M = 2.12$ ,  $SD = 1.37$ ; above norm  $M = 2.75$ ,  $SD = 1.92$ ;  $t(133) = -1.650$ ,  $p = 0.10$ ) or number of employees (below norm  $M = 8.86$ ,  $SD = 44.13$ ; above norm  $M = 9.88$ ,  $SD = 26.17$ ;  $t(133) = -0.090$ ,  $p = 0.93$ ).

From the  $t$ -tests, we can conclude that there are only a few significant differences, that is, in work engagement combined with EW, and work engagement combined with job satisfaction. Both combinations showed significant differences in turnover and profit. We herewith extend our answer to the explorative research question 4: ‘Which type of work-related affective well-being or which combination of types relates to the best business performance?’

Finally, multiple regression analysis can answer the question how much variance in business performance scores can be explained by the variables: workaholism, exhaustion, work engagement and job satisfaction. In Table 5, the multivariate analysis shows that for turnover, the best predictor is EW, for profit, the best predictor is job satisfaction and

**Table 5.** Multiple Regression Analysis

Variables	Turnover	Profit	Number of Employees
	$\beta$	$\beta$	$\beta$
EW	0.40**	0.27	0.15
CW	0.04	0.08	-0.04
Exhaustion	-0.10	-0.22*	-0.10
Work engagement	0.07	0.07	0.03
Job satisfaction	0.22*	0.24**	0.13
$R^2$	0.15**	0.13**	0.03
$DR^2$	0.15**	0.13**	0.03

**Source:** Authors' own.

**Notes:** (i) \*  $p < 0.05$ .

(ii) \*\*  $p < 0.01$ .

for number of employees, no significant predictor is found. The four dimensions of work-related affective well-being explain 15, 13 and 3 per cent of the variance in business performance indicators: turnover, profit and number of employees.

## Conclusions and Implications

The aims of the present study were to investigate the four types of work-related affective well-being in entrepreneurs, and investigate their relationships with business performance. This study starts with the first research question on exploring how the scores on the four types of work-related affective well-being in entrepreneurs relate to those scores in employees. Results show that entrepreneurs in our sample score very high on work engagement, and relatively high on exhaustion, job satisfaction and CW. Scores on EW are lower. We herewith investigated the explorative *Research question 1* and conclude that entrepreneurs score higher than the statistical norm for employees on three of the four types of work-related affective well-being. This confirms previous studies that entrepreneurship is stressful and very demanding (Harris et al., 1999; Tetrick et al., 2000). On the other hand, it confirms the high work engagement (Gorgievski et al., 2010; Smulders, 2006) and high job satisfaction of entrepreneurs (Andersson, 2008; Bradley & Roberts, 2004; Tetrick et al., 2000). The very high score on both work engagement and exhaustion, two poles in the circumplex (González-Roma et al., 2006; Russell, 1980, 2003), is remarkable. Entrepreneurs seem to be energised and fatigued at the same time. We assume that working independently gives a pleasant feeling and excitement of running your own business. However, running an enterprise means coping with uncertainty about future income, coping with responsibility, making decisions and taking risks (Dijkhuizen et al., 2016). These job characteristics can cause work-related strain and exhaustion. From an academic perspective, the exhaustion–engagement relationship was investigated before. Different studies confirmed significant correlations of this relationship with specific job characteristics, such as skill use, personal control, job complexity, task variety and work load (Beck, Ward et al., 1961; Shapiro et al., 1990; Wall et al., 1987; Warr, 1990). As entrepreneurs work independently, we assume that they have considerably high levels of these job characteristics which might explain the strong exhaustion–engagement relationship. Furthermore, in the last few decades, an academic debate circulated on

whether pleasure and displeasure are indeed opposites (Green, Goldman & Salovey, 1993; Russell & Carroll, 1999). Possibly, exhaustion and engagement are two independent unipolar factors (Borgatta, 1961; McNair & Lorr, 1964) instead of bipolar (Green et al., 1993; Russell & Carroll, 1999). This investigation among entrepreneurs could be added to this discussion.

The lower score on workaholism can possibly be explained by the amount of working hours of entrepreneurs compared to employees. In our sample, 28 per cent of the entrepreneurs work 36 hours or less, which conforms to the normal working week in The Netherlands. A higher percentage, 30, works 40 hours a week, 25 per cent works 45 or 50 hours a week and 16 per cent works more than 50 hours a week. According to national statistics, employees with a regular job of 35 hours per week work on average 39.6 hours per week (<http://statline.cbs.nl/>), so they work overtime. The difference between entrepreneurs and employees in working hours is thus not extremely high.

A second part of this study was to examine how the four dimensions of work-related affective well-being interrelate (*Research question 2*). We found strong correlations between the four constructs, confirming earlier studies that the dimensions are related (e.g., Russell, 1980, 2003). As suggested in *Hypothesis 1*, work engagement and job satisfaction are highly positively correlated, thus confirming this hypothesis in line with an earlier study of Schaufeli et al. (2001). The expected relationship between work engagement and workaholism, both EW and CW, is indeed found, but is a negative instead of the expected positive relationship, thus rejecting *Hypothesis 2*. The association of workaholism and job satisfaction was found to be negative as two poles in the circumplex model and thus confirming *Hypothesis 3*, in line with Taris et al. (2009). The other pole in the circumplex model between work engagement and exhaustion was also confirmed (*Hypothesis 4*) matching the results from González-Roma et al. (2006).

Our next examination looked into whether the four types of work-related affective well-being are unique to entrepreneurs, or whether the types overlap, as stated in *Research question 3*. The scores on separate dimensions show an overlap between the four types of work-related well-being. The fact that the entrepreneur seems to feel exhausted, engaged and satisfied, at the same time largely contradicts to the assumptions of the circumplex model (Russell & Carroll, 1999). It is therefore not justified to use the circumplex model as a typology for entrepreneurs. Our answer to *Research question 3*, therefore, is that the four types of work-related affective well-being for entrepreneurs overlap. This seems

to contradict earlier findings (Bakker & Oerlemans, 2011; Russell & Feldman Barrett, 1999), but is in line with the study of Van Katwyk et al. (2000) who found that the 'structure of affect failed to fit a clear circumplex structure when participants were given a context of the workplace. Although work-related affective well-being would seem to vary along dimensions of arousal and pleasure–displeasure, as suggested by Russell (1980), the dimensions are correlated' (Van Katwyk et al., 2000, p. 228). Emotions are not isolated entities, but interrelated (Bakker et al., 2011). It is difficult for people to differentiate one emotion from another while experiencing emotions (Russell & Fehr, 1994). We assume that entrepreneurs experience extreme emotions, as our scores show, leading to mixed feelings. Another explanation for the high scores on different dimensions could be that the scales we used in this study were too general to grasp the momentary emotions. Looking at the questions in the validated scales used in this study, they are asked in a more general way than in a present tense. An example item for exhaustion is 'I find it difficult to concentrate in my free time after work'. This question is not about how one feels at that particular moment, but more about a general feeling. Another example is for work engagement, that is, 'I am proud of the work that I do'. The scales we utilised in this study could explain how an entrepreneur can feel exhausted and engaged at the same time. So, the scales used to investigate the circumplex are of great importance to this study of typology.

The next step in this study was to compare the self-reported business performance of the entrepreneurs for each of the four types of work-related affective well-being. *Research question 4* is based on the question, which type of work-related affective well-being or which combination of types is related to the best business performance. The highest self-reported business performance is achieved by the excessively working entrepreneurs, followed by the most satisfied entrepreneurs. We found significant differences in turnover for EW. Working many hours pays off for entrepreneurs. This outcome both supports and contradicts the existing literature. Supporting studies are the research works by Schaufeli, Taris and Bakker (2006) and Burke (2006). On the other hand, a recent study shows contradictory results (Gorgievski et al., 2014). They did not find a significant relation between workaholism (CW plus EW) and business growth, by means of the same indicators: turnover, profit and number of employees. We assume that the effect of dividing workaholism into two components—EW and CW—gives more insight into the effects of business performance. This is supported by the findings that EW is the most positive indicator for business results in our sample, and

CW leads to the lowest performance. The compulsive element seems to be the counterbalancing element to get the performance out of the hard work, as suggested by previous research (Gorgievski & Bakker, 2010; Schaufeli et al., 2006; Van Wijhe et al., 2011). Worst business results are achieved by compulsively working entrepreneurs, who are also satisfied, or engaged or exhausted. This combination with CW does not have great effects on business performance compared to only CW. Taking both EW and CW into one type might neutralise its effects on business performance.

Entrepreneurs with the combination of EW and being engaged are the most successful group of entrepreneurs on 'turnover' and 'profit'. Both types are in the high activation, so entrepreneurs feeling (positively or negatively) highly activated, perform better. We can assume that these entrepreneurs have a lot of energy to put in to their company to perform. So, if you work very hard and more hours, you get more financial return. By only a small difference, the highest number of employees is achieved by the excessively working and exhausted entrepreneur. Both types are on the unpleasant side of the circumplex. We can assume that more employees cause the entrepreneur more agitation, tension and fatigue. The investigation of the relationship with the four types of work-related affective well-being separately, and the combination of types related to business performance, gives insight into *Research question 4*.

Contradictory to previous findings (Bakker & Oerlemans, 2011; Warr et al., 2014), we found a stronger positive relationship between job satisfaction and performance, than between work engagement and performance. The explanation for this could be that job satisfaction is more than an emotion; it also contains a cognitive evaluation of various job features, and therefore is only weakly or not at all associated with job performance (Bakker & Oerlemans, 2011; Van Katwyk et al., 2000; Warr et al., 2014).

### *Limitations and Future Research*

There are several limitations to this study. The scales of the constructs workaholism, engagement and exhaustion were specifically developed and validated for the work setting. The widely used SWLS is not work related by origin, and was therefore adapted in this study for job satisfaction. It is recommended to test the scale used in this study in the future. Furthermore, a larger sample would give more detail of the overlap of the constructs and the effect on business performance. This might also

explain why the circumplex model is not appropriate as a person typology for entrepreneurs. In this study, we cannot explain this misfit, and further research can give us more insight into the emotions of entrepreneurs. In studying the circumplex model on emotions, we left out the cognitions. Particular emotions are influenced by their own kinds of cognition (e.g., Lerner & Keltner, 2000; Warr et al., 2014; Yik et al., 1999, 2011). More research can add to our understanding in this area. Finally, this is not a longitudinal study to measure the effect on business performance of current work-related affective well-being. A longitudinal study will explain more about the direction or causality of the work-related affective well-being concepts and we recommend future research.

### *Theoretical and Practical Implications*

In this study, we investigated the four types of work-related affective well-being in entrepreneurs, and investigated their relation to business performance, turnover, profit and employment. We wanted to know whether the workaholic, the engaged, the satisfied or the most exhausted entrepreneur would achieve the best business results. Our findings imply that EW is associated with the highest turnover, profits and number of employees. The performance is even better when the entrepreneur not only works excessively, but also is satisfied or engaged. Higher job satisfaction or work engagement is not only positive for performance, but also might lower the risk of working too many hours leading to exhaustion. Workaholism is highly correlated with exhaustion, and it is recommended that an entrepreneur finds the balance between EW and achieving high pleasure by being engaged or satisfied. Furthermore, the entrepreneur does not fit into the circumplex model if used as a person typology (Bakker & Oerlemans, 2011). There is a role for trainers and mentors working with entrepreneurs on affective well-being. They can build programmes or find coaching tools to help entrepreneurs find the balance of the different dimensions to achieve business performance and happiness in their work. Positive affective feelings are needed, especially by entrepreneurs working in a challenging environment where proactive coping with problems and obstacles is almost daily work (Aspinwall & Taylor, 1997; Seo, Feldman Barrett & Bartunek, 2004). For future research, it would be interesting to combine the circumplex not only with self-reported financial business success measures, but also with subjective success measures.

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