

What is Work Engagement?

The Merriam-Webster dictionary describes engagement as "emotional involvement or commitment" and as "the state of being in gear." This reflects our everyday, colloquial connotation of engagement which refers to involvement, commitment, passion, enthusiasm, absorption, zeal, vitality, focused effort, vigor, immersion, and energy. However, neither scholars nor practitioners agree on a conceptualization of engagement in relation to work.

Engagement in Business

Based on an overview of the business literature Attridge (2009) concludes that employee engagement is a major topic for managers and human resources (HR) professionals. So unsurprisingly, virtually all major human resources consultancy firms offer tools to assess and to improve levels of employee engagement. Almost without exception these firms claim conclusive and compelling evidence that employee engagement increases profitability through higher productivity, sales, customer satisfaction, effectiveness, employee retention, and so on. However, with the exception of the Gallup Organization (Harter, Schmidt, & Hayes, 2002) this claim is not *evidenced* by publications in peer-reviewed journals.

Although the descriptions of work engagement that are used in business may differ at first glance, a closer look reveals that in essence engagement is defined in terms of: (a) extrarole behavior (i.e., discretionary behavior that promotes the organization's effective functioning) and (b) commitment to the organization and its goals (i.e., affective commitment), and the desire to stay with the organization (i.e., continuance commitment). Hence, the way business conceptualizes engagement comes close to putting old (extrarole and commitment) wine in new (engagement) bottles.

Engagement in Academia

The first scholar who conceptualized engagement at work was Kahn (1990), an ethnographic researcher who described it as the "... harnessing of organization members' selves to their work-roles: in engagement,

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The Measurement of Work Engagement

Wilmar B. Schaufeli

Introduction

Although the origin of the term is not entirely clear, most likely in its present usage *employee engagement* was coined by the Gallup Organization in the 1990s as a result of 25 years of interviewing and surveying employees (Buckingham & Coffman, 1999). Please note that the terms *employee engagement* and *work engagement* are typically used interchangeably, albeit that the former seems to be preferred in business and consultancy, and the latter in academia. In this chapter the term *work engagement* is used because it is more specific and refers to the relationship of the employee with his or her *work*. Employee engagement, in contrast, also includes the relationship with the *organization*, which might explain its popularity in business and consultancy.

This chapter starts with the questions *What is work engagement?* and *How can it be measured?* Next, the relationship of work engagement with associated concepts such as workaholism and job burnout is discussed. Like engaged employees, workaholics also work very hard, yet both constructs refer to different psychological states. In addition, work engagement has been characterized as the opposite of job burnout, but they seem to have different antecedents and consequences. The chapter concludes with a section on the practical use of engagement questionnaires.

people employ and express themselves physically, cognitively, emotionally and mentally during role performances" (p. 694). In other words, engaged employees put a lot of effort into their work role because they identify with it.

A different approach is followed in occupational health psychology where work engagement is considered as the positive counterpart of burnout (Maslach, Schaufeli, & Leiter, 2001). Work engagement is considered to be indicative for employee health, because it is related to perceived health (Schaufeli, Taris, & Van Rhenen, 2008), proactive behavior (Salanova & Schaufeli, 2008), low sickness absence (Schaufeli, Bakker & Van Rhenen, 2009), and reactivity of the hypothalamic-pituitary-adrenal-axis (Langelaan, Bakker, Schaufeli, Van Rhenen, & Van Doornen, 2006).

According to Maslach and Leiter (1997) engagement is characterized by energy, involvement, and efficacy—the direct opposites of the three burnout dimensions exhaustion, cynicism, and reduced professional efficacy, respectively. By implication, the reversed pattern of scores on the three dimensions of the Maslach Burnout Inventory (MBI; Maslach, Jackson, & Leiter, 1996) is indicative for engagement: *low* scores on exhaustion and cynicism, and *high* scores on professional efficacy. Hence, a one-dimensional approach is adopted that considers engagement and burnout as two ends of a continuum that is assessed by the MBI. However, this approach has a serious drawback; both constructs cannot be studied independently from each other.

In contrast, work engagement is also considered as an independent, distinct concept that is defined in its own right, namely as "... a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (Schaufeli, Salanova, González-Romá, & Bakker, 2002, p. 74). Vigor refers to high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence even 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 and happily engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work. Vigor and dedication are considered the core aspects of work engagement that constitute the opposites of exhaustion and cynicism, respectively, the two core symptoms of burnout. Moreover, vigor and exhaustion span a continuum that is dubbed "energy," whereas the dedication–cynicism continuum is dubbed "identification" (González-Romá, Schaufeli, Bakker, & Lloret, 2006). It follows that work

engagement is characterized by a high level of energy and strong identification with one's work, whereas burnout is characterized by a low level of energy and poor identification with one's work.

In sum, the key reference of engagement for Kahn (1990) is the work role, whereas for occupational health psychologists it is the employee's work activity, or the work itself. In contrast, in business contexts engagement refers to the *organization*, including its mission, goals, and values.

A Model of Work Engagement

Macey and Schneider (2008) presented an all-inclusive conceptual framework that subsumes a broad variety of meanings of engagement. They distinguish between: (a) engagement as a *disposition* (e.g., proactive personality, autotelic personality, positive affectivity); (b) engagement as a *psychological state* (e.g., satisfaction, involvement, energy, absorption); and (c) engagement as a *performance construct* (e.g., personal initiative, organizational citizenship behavior, role expansion). However, by including such a wide range of concepts that all refer to "engagement," the term serves as an umbrella for whatever one wants it to be. Or put differently, when the meaning of engagement is stretched to the limit the concept ends up meaning nothing at all.

In contrast, Schaufeli and Bakker (2010) proposed a model of employee motivation that integrates work engagement into a nomological net. A slightly adapted version of this model is displayed in Figure 10.1, in which work engagement is defined as a psychological state that

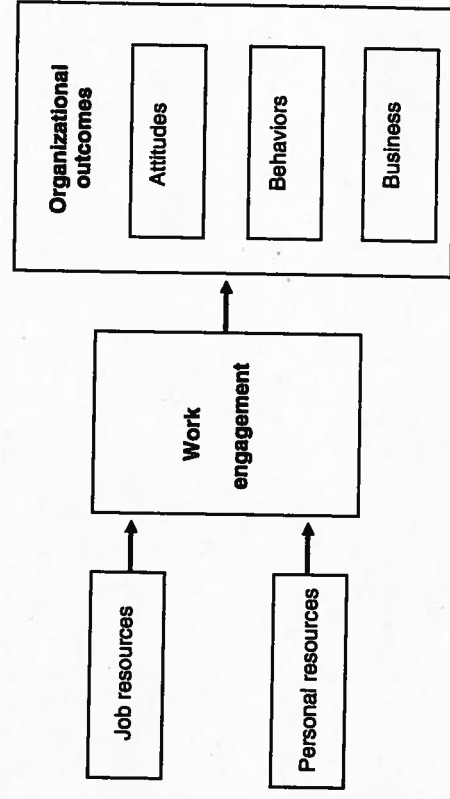


Figure 10.1 A model of work engagement.

mediates the impact of job resources and personal resources on organizational outcomes.

In fact, Figure 10.1 represents the motivational process of the job demands-resources (JD-R) mode (Bakker & Demerouti, 2007) that assumes that job resources have motivational potential and lead to positive organizational outcomes, via work engagement. According to the JD-R model job resources may play either an intrinsic motivational role because they foster employees' growth, learning, and development, or they may play an extrinsic role because they are instrumental in achieving work goals. Based on Fredrickson's broaden-and-built theory of positive emotions, Bakker and Demerouti (2008) argued that work engagement boosts performance because it has the capacity to broaden the employee's momentary thought and action repertoires and to mobilize job and personal resources.

Hence, work engagement is distinguished from various organizational outcomes, which is at odds with the view of most consultancy firms who define engagement *in terms of* these very outcomes. In contrast, this chapter considers work engagement as a psychological state that drives employee's behavioral investment of personal energy and that neither coincides with the performance behavior itself nor with the concomitant attitudes or business outcomes.

How is Work Engagement Measured?

Since no psychometric data are available from engagement questionnaires that have been used by consultancy firms in business contexts, these instruments cannot be reviewed. There is one exception though: Gallup's Workplace Audit (GWA) or Q¹².

The Gallup Q¹²

After an iterative process of item formulation and testing that took several decades, the final wording of the Gallup questionnaire was established in 1998. It was dubbed Q¹² because it includes 12 items. In the development of the Q¹², practical considerations regarding its usefulness for managers in creating change in the workplace have been the leading principles.

A closer look at the item content reveals that the Q¹² basically assesses the employee's perceived job resources. For instance, items like "In the last six months, has someone at work talked to you about your progress?", and "In the last seven days, have you received recognition or praise for doing good work?" tap performance feedback and social support, respectively. Hence, rather than the employee's actual *experience* of engagement, the Q¹² assesses the *antecedents* of engagement in terms of perceived job resources (see Figure 10.1).

Nevertheless, a very high correlation of .91 (after controlling for measurement error) was observed between the Q¹² and a single item measure of job satisfaction (Harter et al., 2002). Moreover, correlations with a composite measure of business unit performance were exactly the same for satisfaction and engagement ($r = .22$; Harter et al., 2002). Taken together this means that Gallup's employee engagement concept is virtually identical with overall job satisfaction. The Q¹² has excellent internal consistency ($\alpha = .88$), whereas several test-retest reliability studies reveal stability coefficients around .80 (Harter et al., 2002). Finally, a strong association of the Q¹² with the Utrecht Work Engagement Scale (see below) indicates its convergent validity (Harter & Schmidt, 2008).

The Utrecht Work Engagement Scale (UWES)

Currently, the Utrecht Work Engagement Scale (UWES) is the most widely used engagement questionnaire and it is available in 22 languages (see www.schaufeli.com). It is a three-dimensional questionnaire that includes subscales for vigor, dedication, and absorption (Schaufeli, Salanova et al., 2002). In addition to the original UWES that contains 17 items, a shortened version of nine items is available (Schaufeli, Bakker, & Salanova, 2006) as well as a student version (Schaufeli, Martinez, Marques Pinto, Salanova, & Bakker, 2002).

Factorial Validity. Confirmatory factor analyses convincingly show that the hypothesized three-factor structure of the UWES is superior to the one-factor model that assumes an undifferentiated engagement factor. This has been demonstrated in samples from China, Finland, Italy, Norway, Portugal, Spain, South Africa, Sweden, and The Netherlands. However, it appears that the three dimensions of engagement are very closely related with intercorrelations exceeding .65.

Factorial Invariance. Confirmatory factor analyses in which samples of two or more countries are simultaneously included, showed that the three-factor structure of the UWES is invariant across nations such as Australia, Belgium, Canada, Finland, France, Germany, The Netherlands, Norway, South Africa, and Spain (Schaufeli et al., 2006). More specifically, the three-factor structure of the UWES is similar and does not differ between countries, but the values of the factor loadings and the correlations between the latent factors slightly differ across nations. In a similar vein, Storm and Rothmann (2003) concluded that the equivalence of the UWES is acceptable for White, Black, Coloured, and Indian members of the South African Police Service, no evidence was found for item-bias in these groups.

In addition to cross-national invariance, factorial invariance was also demonstrated between various occupational groups, such as Dutch (Schaufeli & Bakker, 2004) white collar employees and health care professionals; Spanish workers and students (Schaufeli et al., 2002); Finnish health care workers, educators, and white and blue collar workers (Seppälä et al., 2009); and 10 different Norwegian occupational groups, including air traffic controllers, physiotherapists, and journalists (Nerstad, Richardsen, & Martinussen, 2010). Finally, Seppälä et al. (2009) demonstrated that the correlated three-factor structure of the UWES was invariant across a time interval of 3 years.

Internal Consistency. A meta-analysis of the original and the short versions of the UWES indicated very good internal consistencies for vigor, dedication, and absorption. More particularly, analyses across 33 samples (total $N = 19,940$) from eight different countries (i.e., Australia, Belgium, Finland, Greece, the Netherlands, Norway, Spain, South Africa, and Sweden) revealed that sample weighted values for Cronbach's α of all three scales of the original and short versions of the UWES exceeds .80. Moreover, Cronbach's α for the composite score exceeds .90. Hence, it can be concluded that the three scales of the UWES as well as the composite questionnaire are sufficiently internally consistent.

Stability. An analysis (see note 1) across five samples from three countries (i.e., Australia, the Netherlands, and Norway; total $N = 1,057$)

revealed that the mean stability coefficient of the original and short versions of the UWES across a one-year time interval is .65 (ranging from .56 to .75). Seppälä et al. (2009) studied the rank-order stability of the UWES that reflects the degree to which the relative ordering of individuals within a group is maintained over time. They found high rank-order stability coefficients for the three scales of the short version of the UWES across a 3-year time interval, ranging from .82 to .86.

Construct Validity. Recently, Newman, Joseph, and Hulin (2010) presented the results of a meta-analysis of the relationships between work engagement—as measured with the UWES—and three job attitudes: job satisfaction, job involvement, and affective organizational commitment. They found work engagement shares between 21 and 29% of the variance with these three job attitudes, or between 28 and 37% of the variance after correction for reliability. Moreover, Newman et al. (2010) estimated a corrected correlation of .77 between work engagement and a composite measure of satisfaction, involvement, and commitment, dubbed as the “A-factor.”

In a somewhat similar vein, Halbesleben (2010) carried out a meta-analysis that included 74 unique samples in order to assess the associations between work engagements and the components of the JD-R model. As expected, job demands are negatively associated with engagement ($-.07 < \rho < -.24$, depending on the dimension, whereby ρ is the correlation corrected for unreliability of measures). Job resources ($.30 < \rho < .35$) and organizational outcomes ($.12 < \rho < .20$) are positively related to work engagement. Although all associations are in the expected direction, their sizes are rather moderate. The results from the meta-analysis of Halbesleben (2010), who used the JD-R model as a heuristic model, agree with various studies that explicitly tested the JD-R model. These studies showed that work engagement is associated with (a) *attitude-based outcomes*, such as organizational commitment (Hakanen, Schaufeli, & Ahola, 2008) and turnover intention (Schaufeli & Bakker, 2004); (b) *behavior-based outcomes*, such as low levels of counterproductive work behavior (Balducci, Fraccaroli, & Schaufeli, 2010), in-role and extrarole behavior (Bakker, Demerouti, & Verbeke, 2004), few self-reported medical errors (Prins et al., 2010), supervisor-rated and coworker-rated performance (Halbesleben & Wheeler, 2008), personal initiative (Salanova & Schaufeli, 2008), and sickness absence frequency (Schaufeli et al., 2009); and (c) *business-based outcomes*, such as work-unit innovativeness (Hakanen, Perhonen, & Toppinen-Tanner,

1. Details of the meta-analyses can be obtained from the author of this chapter.

2008), customer satisfaction (Salanova, Agut, & Peiró, 2005), and financial turnover (Xanthopoulos, Bakker, Demerouti, & Schaufeli, 2009).

In conclusion: (a) work engagement as assessed by the UWES seems to be a unitary construct that is constituted by three different yet closely related aspects (vigor, dedication, and absorption); (b) these three factors seem to be invariant across nations and occupational groups; (c) work engagement is relatively stable across time; (d) work engagement is rather strongly related, but is not identical to job satisfaction, job involvement, or affective organizational commitment; (e) work engagement is associated with job demands, resources, and outcomes in ways as predicted by the JD-R model.

Questionnaires with Limited Application

Based on Kahn's (1990) conceptualization of engagement May, Gilson, and Harter (2004) developed a 13-item scale that consists of three dimensions: cognitive, emotional, and physical engagement. The items of these three scales show a striking resemblance with those of the absorption, dedication, and vigor scales of the UWES, respectively. However, instead of three factors only one factor emerged, albeit that the total scale is sufficiently internally consistent ($\alpha = .77$).

Also basing herself on the work of Kahn (1990), Rothbard (2001) distinguished two separate but related components of role engagement: attention (4 items; $\alpha = .74$) and absorption (5 items; $\alpha = .65$). Attention refers to cognitive availability and the amount of time one spends thinking about one's work role, whereas absorption means being engrossed in one's work role. Although both aspects of engagement are moderately correlated ($r = .56$) they seem to play a different role in the dynamics of engagement in work and family roles.

Saks (2006) distinguished between job engagement (5 items; $\alpha = .82$) and organizational engagement (6 items; $\alpha = .90$) that are described as the employee's: "... psychological presence in their job and their organization" (p. 608), respectively. Both aspects of engagement are moderately related with each other ($r = .62$) and show different patterns of relationships with antecedents and outcomes, thus suggesting conceptual distinctness.

Recently, Hultell, and Gustavsson (2010) developed the 18-item Scale of Work Engagement and Burnout (SWEBO) that includes three engagement dimensions (vigor, dedication, and absorption) and three

burnout dimensions (exhaustion, disengagement, and inattentiveness) of three items each. The SWEBO assesses work engagement and burnout by using mood adjectives (e.g. "active," "inspired," "immersed"). The engagement scales are moderately and less strongly interrelated ($.28 < r < .57$) as compared to the burnout scales ($.61 < r < .69$). As expected, the engagement and burnout scales are negatively related ($-.10 < r < -.58$). Except for absorption ($\alpha = .58$), all other scales have internal consistencies that exceed .75.

Obviously, all four operationalizations above agree that engagement is a multidimensional construct and that it includes absorption as its common denominator.

How Is Work Engagement Related to Workaholism and Job Burnout?

Evidently, both engaged workers as well as workaholics work hard. Despite this similarity, confirmatory factor analysis showed that engagement and workaholism (operationalized by working excessively and working compulsively) can indeed be assessed as two distinct constructs (Schaufeli et al., 2008), albeit that the absorption scale of the UWES has a weak double loading on the latent workaholism factor. This might indicate that absorption could also entail an obsessive tendency to work that is characteristic for workaholism. Moreover, Schaufeli et al. (2008) showed that work engagement and workaholism are related to different variables: both types of employees work hard and are loyal to the organization they work for, but in the case of workaholism this comes at the expense of poor mental health and few and unrewarding social contacts outside work, whereas engaged workers feel quite well, both mentally and socially. In a similar vein, Andreassen, Ursin, and Eriksen (2007) found that work engagement is predicted by enjoyment but not by drive, being the more typical workaholism component. Finally, Van Beek, Hu, Schaufeli, Taris, and Schreurs (2012) showed that the motivational regulation of work engagement and workaholism differs. The former is characterized by intrinsic motivation, whereas the latter is characterized by extrinsic (i.e., introjected and identified) regulation.

Because work engagement is supposed to be the positive antithesis of burnout, we also have to consider the way burnout is conceptualized and measured. Basically, two approaches exist that consider burnout to be a one-dimensional or a multidimensional concept (Maslach, Leiter, & Schaufeli, 2008). The one-dimensional conceptualization of

burnout identifies exhaustion as the sole defining criterion, which is also described as wearing out, loss of energy, depletion, debilitation, or fatigue. Although distinctions between various aspects of exhaustion are made (e.g., physical fatigue, emotional exhaustion, and cognitive weariness; Shirom & Melamed, 2005), the corresponding measures like the Shirom-Melamed Burnout Measure (SMBM) inevitably produces a single overriding factor of exhaustion.

Based on a theoretical analysis, Schaufeli and Taris (2005) argue in favor of a two-dimensional model of burnout that is characterized by exhaustion and withdrawal. In their view, burnout is both the inability and the unwillingness to spend effort, reflecting its energetic and its motivational component, respectively. The unwillingness to perform manifests itself by increased resistance, reduced commitment, lack of interest, disengagement, mental distancing, cynicism, and so on—in short, psychological withdrawal. This withdrawal reaction serves as a protective mechanism against exhaustion, it prevents the employee from spending additional energy. The Oldenburg Burnout Inventory (OLBI) uses this conceptualization of burnout and includes two dimensions that are labeled “disengagement” and “exhaustion” (Demerouti, Bakker, Vardakou, & Kantas, 2002). Since these two dimensions also include positively framed items that refer to “dedication” and “vigor,” respectively, the OLBI might be used to assess work engagement as well, namely by reversing the negatively worded items. A recent study found that the disengagement (burnout) and dedication (engagement) items of the OLBI constitute one “identification” dimension, whereas the exhaustion (burnout) and vigor (engagement) items represent two separate but highly related constructs (Demerouti, Mostert, & Bakker, 2010). The MBI, which is the most frequently used questionnaire to assess burnout, includes in addition to exhaustion and cynicism a third dimension: reduced professional efficacy (Maslach et al., 1996). Tellingly, a recent study on the convergent validity among various burnout instruments (e.g., SMBM, OLBI, and MBI) concludes that burnout is best conceived as a two-dimensional construct consisting of exhaustion and withdrawal, which are two related but conceptually distinct aspects (Hu & Schaufeli, 2011).

In accordance with the assumption that work engagement is the positive counterpart of burnout, the three dimensions of the UWES are negatively related to burnout. Studies using confirmatory factor-analyses revealed that the correlations between the latent MBI-burnout and engagement factors ranged from -0.45 to -0.66 (e.g., Schaufeli, Salanova

et al., 2002; Schaufeli, Bakker, & Salanova, 2006; Schaufeli, Taris, & Van Rhenen, 2008). However, instead of loading on the burnout factor, reduced professional efficacy loads on the engagement factor. A possible explanation for this “wrong” loading is that lack of professional efficacy is measured with reversed positively formulated items. This explanation is supported by a study by Schaufeli and Salanova (2007) who showed that an *inefficacy* scale, consisting of negatively reworded MBI-*efficacy* items, loads on burnout, whereas the original positively worded MBI-*efficacy* scale loads on engagement.

In conclusion, although some overlap seems to exist with workaholism (notably absorption) this does not seriously call into question the conceptual distinctness of work engagement. The bottom line is that engaged workers are *pulled* to their work because for them work is fun, whereas workaholics are *pushed* to their work by an uncontrollable, compulsive inner drive that they cannot resist. Furthermore, as expected, engagement is negatively related with burnout, whereby the unexpected results regarding professional efficacy are likely to result from an artifact caused by the reversing positively phrased items. Therefore it is recommended for future research to use negatively worded inefficacy items to assess burnout (Schaufeli & Salanova, 2007).

What about the Practical Use of Engagement Questionnaires?

Based on the conceptual model that is displayed in Figure 10.1, as well as on its excellent psychometric features the UWES seems to be the most promising tool to assess work engagement, both in academia as well as in business, not the least because it is linked to meaningful organizational and business outcomes. The UWES may also be used in different national contexts. However, one should be cautious when comparing levels of work engagement *between* countries, particularly when Asian countries such as Japan are concerned. It is observed that Japanese employees score consistently lower on work engagement than employees from Western countries, most likely because of the prevailing tendency in Japan to suppress the expression of positive affect (Shimazu, Miyanaka, & Schaufeli, 2010). This underscores the necessity for establishing nation-specific norm-scores for the UWES that are based on representative samples. Such cut-off values are available in the Netherlands and are used as reference points for identifying employees who score “(very) low,” “average,” or “(very) high” on work engagement as compared with the national working population.

In Spain as well as in the Netherlands, the UWES (and the MBI) are integrated into a more comprehensive, online tool that is based on the job demands-resources model and that is also used commercially. This tool not only assesses the employee's levels of work engagement (and burnout), but also its drivers and consequences. Participants receive an individualized personal report with their level of engagement (and burnout) as well their scores on various job demands, job resources, personal resources, and organizational outcomes—as compared to a reference group. This report may be discussed with colleagues, supervisors, or professionals such as occupational physicians or psychologists. By aggregating the information of individual employees to the level of work teams, departments, or the organization as a whole, specific suggestions can be made as to how to enhance work engagement (and decrease burnout) and thus improve organizational outcomes (see Schaufeli & Salanova, 2010, for further details).

Conclusion

Work engagement is a popular concept, in business and academia alike. Although some alternatives of limited application exist, the UWES emerges as a valid and reliable indicator of work engagement, which can be considered the positive counterpart of job burnout. Not the least because engagement, as assessed with the UWES, is related to attitude-based, behavior-based, and business-based outcomes. Moreover, engagement is associated with, but nevertheless conceptually and empirically different from, job satisfaction, work involvement, organizational commitment, and workaholism. The UWES can be used as a screening instrument in organizations to identify those employees whose levels of engagement may be boosted.

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