

# Amplition in the workplace: building a sustainable workforce through individual positive psychological interventions

***Citation for published version (APA):***

Le Blanc, P. M., & Oerlemans, W. G. M. (2016). Amplition in the workplace: building a sustainable workforce through individual positive psychological interventions. *Papeles de Psicólogo*, 37(3), 185-191.

***Document status and date:***

Published: 01/01/2016

***Document Version:***

Publisher's PDF, also known as Version of Record (includes final page, issue and volume numbers)

***Please check the document version of this publication:***

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

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# AMPLIFICATION IN THE WORKPLACE: BUILDING A SUSTAINABLE WORKFORCE THROUGH INDIVIDUAL POSITIVE PSYCHOLOGICAL INTERVENTIONS

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La sostenibilidad de la fuerza laboral es de vital importancia para la viabilidad y la ventaja competitiva de las organizaciones contemporáneas. Así, y en paralelo con el aumento de la Psicología Organizacional Positiva, las organizaciones han incrementado su interés en fomentar el bienestar psicológico positivo de sus empleados. En este trabajo, las intervenciones de amplificación –i.e. intervenciones que tienen como objetivo fomentar el bienestar positivo en el trabajo– se presentan como una herramienta valiosa para incrementar la sostenibilidad de la fuerza laboral. En la pasada década, se han desarrollado y probado la efectividad de algunas intervenciones realizadas en el contexto laboral centradas en la amplificación. En el presente trabajo, en primer lugar destacamos algunas precondiciones importantes para el éxito de las intervenciones y brevemente discutimos el proceso de intervención en sí mismo. A continuación, se presenta una revisión de los trabajos empíricos sobre las intervenciones de amplificación, centrándonos en intervenciones que tienen como objetivo fomentar el engagement en el trabajo de los empleados. La investigación futura debe centrarse en probar los efectos de este tipo de intervenciones sobre los resultados a nivel de equipo y a nivel organizacional.

**Palabras clave:** Bienestar psicológico positivo, Intervenciones de amplificación, Proceso de intervención, Engagement.

Workforce sustainability is of vital utmost importance for the viability and competitive advantage of contemporary organizations. Therefore, and in parallel with the rise of positive organizational psychology, organizations have become increasingly interested in how to enhance their employees' positive psychological well being. In this paper, amplification interventions – i.e. interventions aimed at enhancing positive work-related well being - are presented as a valuable tool to increase workforce sustainability. In the past decade, some work-related interventions focused on amplification have been developed and tested for their effectiveness. In this paper, we will first outline some important preconditions for successful interventions and briefly discuss the intervention process itself. Next, we will give an overview of empirical work on amplification interventions, focusing on interventions that are aimed at enhancing employee work engagement. Future research should focus on testing the effects of these type of interventions on outcomes at the team and organizational level.

**Key words:** Positive psychological well-being, Amplification interventions, Intervention process, Engagement.

Contemporary organizations are facing dynamic and changing environments that emphasize the importance of flexibility, adaptation, and (social) innovation. Because of this, over the past 20 years, we have seen an increase in business and academic interest in building sustainable organizations that have the capacity to endure and simultaneously satisfy a triple bottom line of environmental, economic, and human performance. Yet, in comparison to the environmental and economic dimension of sustainability, substantially less attention has been focused on its human dimension (Spreitzer, Porath & Gibson, 2012).

At the same time, in most industrialized countries, the retirement age is raised due to the proportional increase of the elderly. So, the majority of workers will have to work for a prolonged number

of years while the influx of young workers in the labour market is declining. Lifetime employment is no longer guaranteed, as the qualifications that are required for jobs are becoming increasingly complex while, simultaneously, the 'half-life' of these qualifications is becoming increasingly shorter (van der Heijden, 2005). For all these reasons, workforce sustainability nowadays is of vital economical importance, as it directly affects the viability and competitive advantage of organizations. Particularly, highly innovative sectors of industry - e.g., knowledge-intensive firms – that have to cope with frequent technological (and organizational) changes as well as fierce international competition - are in need of a sustainable workforce (De Grip, Van Loo & Sanders, 2004).

Early definitions of employee sustainability conceptualized it in terms of the prospects to keep on working while retaining health and well being (Van der Klink et al., 2010), or in terms of adaptability to the myriad of work-related changes occurring in today's economy (Fugate, Kinicki & Ashfort, 2004). However, we would like to propose that merely being

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healthy and able to keep on working is not enough in today's business; nowadays, employees have to be motivated to 'go the extra mile' and have to be pro-active in (co)creating change by taking personal initiative and demonstrating creative and innovative work behaviour. In other words: work engagement is the key to employee sustainability in contemporary organizations.

### WORK ENGAGEMENT

Work engagement is defined as "a positive, active psychological state that is characterized by vigor, dedication, and absorption" (Schaufeli & Bakker, 2004, p. 295). Vigorous employees experience high levels of energy at work and motivation to invest effort in work. They are dedicated in being strongly involved into work and experiencing feelings of pride and enthusiasm about their work. Finally, absorption entails immersion in and concentration on work, as well as the feeling that time is flying while working. Employee work engagement has become very popular in science and practice, particularly as a consequence of the positive psychology movement, i.e. the science of positive subjective experience, positive individual traits and positive institutions (Seligman & Csikszentmihalyi, 2000). This movement was the starting point for a shift in focus from 'fixing what is broken' to 'nurturing what is best'. Moreover, empirical evidence indicates that employee work engagement is predictive of many important organizational outcomes. Examples of these outcomes include increased creativity, better in-role performance, reduced company-registered sickness absenteeism, increased organizational citizenship behaviors, better financial results at the company level, and increased client satisfaction (see for an overview: Demerouti & Cropanzano, 2010).

Not surprisingly, organizations have become increasingly interested in interventions to develop and sustain employee work engagement. These fall within the category of positive psychology interventions, that can be characterized as any intentional activity or method that is based on (a) the cultivation of positive subjective experiences, (b) the building of positive individual traits, or (c) the building of civic virtue and positive institutions (Myers, van Woerkom & Bakker, 2013). Broadly speaking, a distinction can be made between interventions that are primarily targeted at the organization and interventions that are primarily targeted at individual employees. In this paper, the focus will be on the latter type of interventions. In the following paragraphs, we will outline three types of individual positive psychological interventions to enhance employee work engagement, i.e. PsyCap interventions, Strengths-based interventions, and Happiness interventions. Before turning to a more detailed description of each of these three types of interventions, we will first outline some important preconditions for interventions and briefly discuss the intervention process itself.

### INTERVENTIONS: PRECONDITIONS AND PROCESS

The success of an intervention is not only dependent on its content, but also on the quality of the implementation process. An important precondition for success is to assure commitment for the intervention from the organization's (top) management, which in this case means that management acknowledges employee well-being as a core organizational value, and is willing to invest the necessary (financial) resources to develop and sustain it. Moreover, employees themselves should also be convinced of the benefits of high work-related well being both for themselves and for their organization.

Kompier and Cooper (1999) analyzed eleven European workplace interventions aimed at reducing work stress and identified several process variables that contributed to the success of these interventions. Interventions were more successful in sustaining employee well-being when: a proper risk assessment was performed using adequate instruments; organizations used a stepwise and systematic approach; there was a clear structure (tasks, responsibilities); consultants or researchers used a participative approach; management and representatives of employees co-operated; employees were recognized as 'experts'; the responsibility of management was emphasized; and monitoring and intervention were combined.

Regarding the implementation of an intervention, Bakker, Oerlemans and Ten Brummelhuis (2013) recommend to follow Van Strien's (1997) regulative cycle. The first phase in this cycle is the formulation of the goal of the intervention (e.g., engaged employees). The second phase is the diagnosis. In this phase, an analysis is made of the situation: what is the current level of employee engagement and what are its most important drivers? This phase should result in a diagnosis of the most important organizational and personal causes of (lack of) engagement. The third phase in the regulative cycle is the design of the intervention – this is called the action plan (Van Strien, 1997). What will be done to influence the drivers of engagement? What are the means to realize this? Phase four is the implementation of the plan or the intervention itself. In this phase, the plans that were made in the previous step are implemented. There will be monitoring of the progress by conducting assessments. Regular employee surveys provide a means of monitoring engagement and its fluctuations across locations, departments, and teams. In the final, fifth phase, the project is evaluated as regards its effects on the targeted outcomes as well as the intervention process itself. This phase answers the question, "How well did our intervention accomplish the objectives that were planned? Was the intervention effective? How efficient was it?"

Now that we have taken a closer look at the preconditions for intervening and the intervention process itself, it is time to address the three types of individual positive psychology interventions that could be used to enhance employee work engagement in more detail.

## AMPLIFICATION INTERVENTIONS

### *PsyCap Intervention*

Luthans, Youssef & Avolio (2007, p. 3) define Psychological Capital (PsyCap) as “an individual’s positive psychological state of development characterized by: (1) having confidence (self efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals, and when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success.”. Psychological capital makes individuals put extra effort in the task they have to accomplish, motivates them to do so by letting them expect positive results, enables them to generate various solutions if problems occur, and makes individuals cope well in case of eventual setbacks (Luthans, Avey, Avolio & Peterson, 2010).

Several diary studies have demonstrated that daily levels of PsyCap-aspects are positively related to work engagement. In a study among flight attendants, Xanthopoulou et al. (2008) found that daily self-efficacy predicted daily work engagement. Moreover, the results of a study among employees of a fast-food company showed that daily optimism was also related to daily work engagement (Xanthopoulou, Bakker, Demerouti & Schaufeli, 2009). Ouweneel, Le Blanc, Schaufeli and van Wijhe (2012) performed a diary study among university employees that showed that positive emotions felt after a working day predicted how hopeful employees were regarding their work at the start of the next working day. Furthermore, the level of hope at the start of a working day appeared to have a positive effect on all three dimensions of work engagement at that same day. In a longitudinal questionnaire study among university employees, Ouweneel, Le Blanc & Schaufeli (2012) found that personal resources (i.e., hope, optimism and self-efficacy) were reciprocally related to positive emotions, and that personal resources predicted employees’ level of work engagement six months later. Though these studies demonstrate that the separate aspects of PsyCap are related to (dimensions of) work engagement, Sweetman and Luthans (2010) propose that the overall PsyCap factor will have greater predictive power for work engagement than each of the four psychological resources separately because of their synergistic power. Recently, Boamah and Laschinger (2015) showed that overall PsyCap is significantly related to new graduate nurses’ work engagement.

The important question then is whether PsyCap is malleable and can be increased in order to improve work engagement and other positive work outcomes. Several studies show that PsyCap can indeed be developed through targeted interventions (e.g., Luthans, Avey & Patera, 2008). Luthans, Avey, Avolio, and Peterson (2010) provide a detailed description of what such an intervention might look like. They assigned participants randomly to treatment ( $N = 153$ ) or control ( $N = 89$ ) groups. In the

intervention treatment, the facilitators used a series of writing, discussion, and reflective exercises specific to each of the four PsyCap constructs to impact PsyCap development. Examples of the exercises used included one that focused on broadening the hope-oriented self-regulating capacity and pathways thinking toward a specific goal. First, each participant was asked to consider and then write down personal goals. The facilitator led participants through a series of techniques to set and phrase goals to increase agentic capacity (Bandura, 2008). This included parceling large goals into manageable units, thereby also increasing efficacy over smaller subgoals. Next, participants were asked to consider multiple pathways to accomplishing each goal and to share those pathways in small discussion groups within the intervention session. In other words, the participants acted as models for each other. Thus, the capacity for pathway generation was expected to be increased through vicarious learning and in turn to enhance participants’ level of efficacy in utilizing the hope application of deriving multiple pathways to accomplish a given goal. In addition, by increasing their efficacy to accomplish the goal, the participants were expected to increase their positive expectations of goal accomplishment (i.e. their optimism). In a study on the effects of a ‘personal effectiveness training’, Demerouti, van Eeuwijk, Snelder and Wild (2010) demonstrated that by using methods like mastery and successful experiences, stepping, vicarious learning and social persuasion/positive feedback, a personal effectiveness training led to significant increases in both self-rated and other-rated PsyCap-levels. Finally, Hodges (2010) found that a PsyCap micro intervention among managers led to increases in PsyCap levels among their subordinates over a six-week period, which he interpreted as preliminary evidence for a contagion effect. Haar, Roche and Luthans (2014) found further evidence for a contagion effect, i.e. a reciprocal transfer over of leaders’ PsyCap and their follower teams’ collective PsyCap and work engagement. Moreover, their results showed that follower teams influenced their leaders’ PsyCap and engagement more strongly than vice-versa.

### *Strengths-based Interventions*

Strengths-based interventions are aimed at identifying and developing personal strengths to help a person to become more effective and more successful. Strength-based interventions work on the premise that people have abilities and internal resources that can be utilised to achieve remarkable outcomes, when understood and applied correctly. Individual strengths can be defined as positive traits reflected in thoughts, feelings, and behaviors (Park, Peterson & Seligman, 2004). Examples are curiosity, bravery, kindness, and gratitude. Strengths exist in degrees and can be measured as individual differences. Using strengths is intrinsically motivating, engaging, satisfying, enjoyable, energizing and favorable for the health of an individual (Linley & Harrington, 2006; Peterson & Park, 2006; Peterson & Seligman, 2004). Some studies empirically proved

the positive effects of employing strengths, such as enhanced well-being (Govindji & Linley, 2007; Quinlan et al, 2011), self efficacy (Govindji & Linley, 2007) and engagement in activities (Harzer & Ruch, 2012). Van Woerkom, Oerlemans, and Bakker (2015) showed that self-efficacy fluctuated significantly at the intrapersonal, daily level, as a function of strength use on a daily basis, which in turn positively related to daily work engagement among a sample of civil engineers. Several tools for assessing an individual's strengths have already been developed, such as the Virtues-in-Action Classification of Individual Strengths (VIA-IS; Peterson & Seligman, 2004). This test identifies 24 strengths that people may possess to various degrees such as leadership, love of learning, and creativity. Another often-used instrument to detect strengths is the Clifton Strengths Finder (CSF) developed by Gallup. This is a talent-based framework and contains 177 items designed to measure talent in 34 possible themes (Asplund, Lopez, Hodges & Harter, 2007).

Despite the benefits of using one's strengths, only one-third of all individuals are capable of identifying their own strengths (Hill, 2001). Moreover, many people note that they do not use their strengths very often at work (Buckingham, 2007). To stimulate people to identify and make more use of their strengths, organizations can implement strengths interventions. A strength intervention can be defined as 'a process designed to identify and develop strengths in an individual or a group. Interventions encourage individuals to develop and use their strengths, whatever they may be' (Quinlan et al., 2011, p. 1147). This definition includes three components (Verhulst, 2014): The first component, strengths identification, generally results in a list of most important strengths. The second component is strengths development, in which individuals are motivated to cultivate and refine their strengths (Van Woerkom & Meyers, 2015). According to Biswas-Diener, Kashdan and Minhas (2011), it is important that individuals learn how they can use their strengths in a wise way, depending on situational factors. The third component is the use of strengths, in which individuals are stimulated to specify how, how often, when, and in which situation they plan to use their strengths by making a concrete action plan (Van Woerkom & Myers, 2014). In this way, individuals are encouraged to use their most outstanding strengths more or in new ways (Seligman, Steen, Park & Peterson, 2005). Strength interventions thus combine two approaches towards the strengths of an individual: the 'identify and use' approach that views strengths more as constant traits, and the 'strengths development approach' that views strengths as personal capacities that can grow when individuals try to apply their strengths in the most effective way. Strengths-based interventions may focus on individual strengths, such as reflecting on times when a person was at his/her best and the strengths he/she used then; identifying signature strengths; or a combination of identifying and using strengths in a new way

(Seligman, Steen, Park, & Peterson, 2005). Another example is the reflected best self exercise that helps people learn more about their unique talents by asking others in their surroundings to provide examples of moments when they were at their best (Roberts, Dutton, Spreitzer, Heaphy, & Quinn, 2005). It has been argued that working with one's strengths is fulfilling and engaging, and induces a feeling of acting in an authentic manner and being true to oneself (Peterson & Seligman, 2004). For those reasons, using strengths may also contribute to enhanced work engagement. Based on a meta-analysis, Harter, Schmidt and Hayes (2002) concluded that strength based development is indeed linked to increases in employee engagement, which in turn has been meaningfully linked to business outcomes including profitability, turnover, safety, and customer satisfaction.

An example of a general strength-based intervention is described by Seligman et al (2005). Participants were asked to first identify their top individual strengths (with the VIA-IS). Subsequently, participants were encouraged to use one of their top character strengths in a new or different way every day for at least one week (Seligman et al., 2005). There may be various ways to 'translate' this type of strengths-based intervention to a workplace context (Bakker, Oerlemans & ten Brummelhuis, 2013). For instance, one option is to identify what kind of strengths are required for particular types of jobs and thereafter assess the degree to which employees fit the strengths needed to perform such specific job activities. Thus, a better match between job types and employee strengths should lead to higher employee engagement. Another way to go is to provide individual feedback to employees (e.g., through online modules) about their most important strengths. Thereafter, an option would be to give employees more insight with regard to the frequency with which they use their top character strengths on a daily basis while performing work-related activities (e.g., through keeping a work-related diary). If it turns out that employees are insufficiently using their strengths, a next step would be to provide employees with specific pathways that lead them to use their strengths within the work context in a new way. This may lead employees to (re)consider how to use their strengths in specific types of job-related activities, which, in turn, may enhance their level of work engagement. There already is some preliminary empirical evidence at the business unit level for the effects of strengths-based developmental interventions on the so-called employee engagement metric (Buckingham & Coffman, 1999). Clifton and Harter (2003) reviewed data from 65 organizations, all of which were involved in employee engagement interventions. The intervention group consisted of four companies who had used strengths-based development and the control group was made up of 61 organizations that had not. The intervention group exceeded the control group on employee engagement from year one to year two, and even more dramatically so from year one to year three.



### **Happiness Interventions**

A third avenue to enhancing work engagement may be to improve employee happiness. Various activity-based interventions developed within the field of positive psychology appear to have positive effects on happiness in general, and might thus also be considered as useful for increasing happiness at work. Conceptually speaking, work engagement is comparable to happiness. Happiness is defined as a positive affective-cognitive state (Diener, Suh, Lucas & Smith, 1999) that comprises of feeling good as well as thinking positively about your life. The same applies to work engagement; it entails both feeling good at work and evaluating your work positively. So, work engagement can be considered a domain-specific form of happiness.

Specific examples of activity-based happiness interventions are activities aimed at expressing gratitude, performing acts of kindness, optimistic thinking, engaging in sports/exercise, and spiritual activities such as yoga or mindfulness (for an overview, see Lyubomirsky, 2008). For example, Ouweneel, Le Blanc and Schaufeli (2014) studied the effect of two positive interventions: 'practicing random acts of kindness' (Study 1) and 'thoughts of gratitude' (Study 2). In Study 1, students were instructed to practice random acts of kindness, during a five-day period (Monday-Friday). This could be anything ranging from holding a door for someone at the university, greeting strangers in the hallway, helping other students with preparing for an exam etc. Compared to a control group (no treatment), the intervention group showed a significant increase in positive emotions and study (academic) engagement. In Study 2, students were asked to think of people or experiences they were grateful for during the same five-day period. Every day, they were asked to think of a different period of their life, and to write down a short note to whom they wanted to express their gratitude and why. Results indicated that students' level of daily positive emotions in the experimental condition increased significantly (relative to a control group). However, there was no significant effect on their level of study engagement. Ouweneel et al. (2014) explain the difference in effect of the two interventions by the fact that in the 'thoughts of gratitude' intervention students did not actually send or read out their gratitude letter loud to the person in question, and therefore did not receive any direct positive feedback from this activity. In contrast, acts of kindness often evoke immediate positive feedback from the recipient.

Importantly, the effectiveness of this type of happiness/engagement interventions is likely dependent on personal interests, values, and personality (Lyubomirsky, Sheldon & Schkade, 2005). For example, extraverts may benefit most from an activity that requires regular contact with others (e.g., acts of kindness towards others). As people have to invest considerable time and effort in performing a particular activity to yield sustained happiness/engagement change, it is important that they stay motivated to perform the intervention activities during a prolonged period of time. Therefore, it is recommended that persons first

identify what kind of activities will likely be inherently joyful, interesting, and thus 'autotelic' in nature (e.g., Deci & Ryan, 2000).

One way to identify the kind of activities that are joyful and interesting would be to let people systematically reflect on their (work) day by filling out a diary based on a Day Reconstruction methodology (Kahneman, Krueger, Schkade, Schwarz & Stone, 2004; Oerlemans, Bakker & Veenhoven, 2011). The DRM combines elements of experience sampling and time diaries, and is designed specifically to facilitate accurate emotional recall. Respondents are first asked to fill out a time diary summarizing episodes that occurred in the preceding day. In particular, respondents describe each episode of the day by indicating when the episode began and ended, what they were doing, where they were, and with whom they were interacting. To ascertain how employees feel, participants are asked to report the pleasure and intensity of their feelings in accordance with the circumplex model of affect (Russell, 2003). For instance, through a DRM approach, employees can receive specific feedback on a) what kind of work-related activities they spend most of their time, and b) what kind of work-related activities are most joyful and interesting to perform. This kind of information may help employees planning their workday such that most time is spent on work-related activities that are most joyful, interesting, and rewarding for them. Giving people accurate and daily feedback on what kind of (work) activities they find most interesting and joyful may be a vital aspect in improving employee work engagement.

As an example, teachers who participated in a day reconstruction study rated the degree to which they considered their work activities to be self-concordant (i.e. in line with their personal values and personal choice rather than external). Engaging in highly self-concordant activities buffered the negative relationships between momentary work demands and momentary happiness during work activities (Tadic, Bakker & Oerlemans, 2013). Moreover, teachers who identified their daily work-related activities as challenging rather than hindering (Tadic, Bakker & Oerlemans, 2015) reported higher levels of positive affect and work-engagement. Similar findings are also reported in the literature on recovery from work. Employee enjoyment during off-job activities positively moderates the relationship between the time employees spend on such off-job activities and the degree to which they are able to recover from their daily work-related efforts (Oerlemans, Bakker & Demerouti, 2014).

### **CONCLUSION**

In this paper, we discussed three types of individual positive psychological interventions that have the potential to develop and sustain employee engagement in organizational settings, i.e. interventions aimed at increasing employees' Psychological capital (efficacy, hope, optimism, and resilience), Strength-based interventions and Happiness interventions. Although

research on the effects of these types of interventions on work-related outcomes is still in its infancy, existing empirical evidence suggests that these interventions are promising tools to enhance employee work engagement and thus to strengthen workforce sustainability. An important avenue for future research is to examine the effects of this type of interventions on outcome measures at higher organizational levels (i.e., team, department and/or organization).

## REFERENCES

- Asplund, J., Lopez, S.J., Hodges, T. & Harter, J. (2007). *Technical report: Development and validation of the Clifton StrengthsFinder 2.0*. Princeton NJ: The Gallup Organization.
- Bakker, A.B., Oerlemans, W.G.M., & Ten Brummelhuis, L.L. (2013). Becoming fully engaged in the workplace: What individuals and organizations can do to foster work engagement. In: R.J. Burke & C.L. Cooper (Eds.), *The fulfilling workplace: The organization's role in achieving individual and organizational health*. UK: Gower.
- Bandura, A. (2008). An agentic perspective on positive psychology. In: S.J. Lopez (Ed.), *Positive psychology* (Vol. 1, pp. 167–196). Westport, CT: Greenwood.
- Biswas-Diener, R., Kashdan, T.B. & Minhas, G. (2011). A dynamic approach to psychological strength development and intervention. *Journal of Positive Psychology, 6*, 106-118.
- Boamah, S. & Laschinger, H. (2015). Engaging new nurses: the role of psychological capital and workplace empowerment. *Journal of Research in Nursing, 20*, 265-277.
- Buckingham, M. & Coffman, C. (1999). *First break all the rules: What the world's greatest managers do differently*. New York, NY: Simon & Shuster.
- Clifton, D.O. & Harter, J.K. (2003). Investing in strengths. In: A.K.S. Cameron, B.J.E. Dutton and C.R.E. Quinn (Eds), *Positive Organizational Scholarship* (pp. 111-121). San Francisco: Berrett-Koehler Publishers Inc.
- Deci, E. L., & Ryan, R. M. (2000). The 'what' and 'why' of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227-268.
- De Grip, A., Van Loo, J. & Sanders, J. (2004). The Industry Employability Index: taking account of supply and demand characteristics. *International Labour Review, 143*, 211-233.
- Demerouti, E., & Cropanzano, R. (2010). From thought to action: Employee work engagement and job performance. In A. B. Bakker & M. P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 147–163). New York: Psychology Press.
- Diener, E., Suh, E.M., Lucas, R.E. & Smith, H.L. (1999). Subjective well-being: Three decades of progress: *Psychological Bulletin, 125*, 276-302.
- Fugate, M., Kinicki, A.J. & Ashfort, B.E. (2004). Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational Behavior, 65*, 14-38.
- Govindji, R. & Linley, P.A. (2007). Strengths use, self concordance and well-being: Implications for strengths coaching and coaching psychologists. *International Coaching Psychology Review, 2*, 143-153.
- Haar, J.M., Roche, M.A. & Luthans, F. (2014). *Do leader psychological capital and engagement influence follower teams or vice versa?* Paper presented at the Academy of Management Conference, Philadelphia.
- Harter, J.K., Schmidt, F.L. & Hayes, T.L. (2002). Business-unit-level relationships between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology, 87*, 268-279.
- Harzer, C. & Ruch, W. (2012). When the job is a calling: The role of applying one's signature strengths at work. *Journal of Positive Psychology, 7*, 362-371.
- Hodges, T.A. (2010). *An experimental study of the impact of Psychological Capital on performance, engagement, and the contagion effect*. Dissertations and theses from the College of Business Administration. Paper 7. Lincoln: University of Nebraska.
- Kahneman, D., Krueger, A., Schkade, D., Schwarz N., & Stone, A. (2004). A survey method for characterizing daily life experience: The Day Reconstruction Method. *Science, 306*, 1776–1780.
- Kompier, M. & Cooper, C.L. (1999). Improving health and productivity through stress prevention: The success of a participative and stepwise approach. In: M. Kompier & C.L. Cooper (Eds), *Preventing stress, improving productivity: European case studies in the workplace* (pp. 1-8). London: Routledge.
- Linley, P.A. & Harrington, S. (2006). Playing to your strengths. *Psychologist, 19*, 86-89.
- Luthans, F., Avey, J. B., Avolio, B. J., & Peterson, S. J. (2010). The development and resulting performance impact of positive psychological capital. *Human Resource Development Quarterly, 21*, 41-67.
- Luthans, F., Avey, J. B., & Patera, J. L. (2008). Experimental analysis of a web-based training intervention to develop positive psychological capital. *Academy of Management Learning & Education, 7*, 209-221.
- Luthans, F., Youssef, C.M, & Avolio, B.J. (2007). *Psychological capital: Developing the human competitive edge*. Oxford, UK: Oxford University Press.
- Lyubomirsky, S., Sheldon, K.M., & Schkade, D. (2005). Pursuing happiness: The architecture of sustainable change. *Review of General Psychology, 9*, 111-131.
- Myers, M.C., Van Woerkom, M. & Bakker, A.B. (2013). The added value of the positive: A literature review of positive psychology interventions in organizations. *European Journal of Work & Organizational Psychology, 22*, 618-632.
- Oerlemans, W.G.M., Bakker, A.B. & Demerouti, E. (2014). How feeling happy during off-job activities helps successful



- recovery from work: a day reconstruction study. *Work & Stress*, 28, 198-216.
- Oerlemans, W.G.M., Bakker, A.B., & Veenhoven, R. (2011). Finding the key to happy ageing: A day reconstruction approach to happiness among elderly. *Journal of Gerontology: Psychological Sciences*, 66B, 1-10.
- Ouweneel, E., Le Blanc, P.M. & Schaufeli, W.B. (2012). Don't leave your heart at home: Positive emotions, resources, and engagement at work. *Career Development International*, 16, 537-556.
- Ouweneel, E., Le Blanc, P.M. & Schaufeli, W.B. (2014). On being grateful and kind: Results of two randomized controlled trials on study-related emotions and academic engagement. *The Journal of Psychology: Interdisciplinary and applied*, 148, 37-60.
- Ouweneel, E. Le Blanc, P.M., Schaufeli, W.B. & Van Wijhe, C. (2012). Good morning, good day: A diary study on positive emotions, hope, and work engagement. *Human Relations*, 65, 1129-1154.
- Park, N., Peterson, C., & Seligman, M. E. P. (2004). Strengths of character and well-being. *Journal of Social and Clinical Psychology*, 23, 603-619.
- Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification*. Washington, DC: American Psychological Association.
- Peterson, C. & Park, N. (2006). Character strengths in organizations. *Journal of Organizational Behavior*, 27, 1149-1154.
- Quinlan, D., Swain, N., & Vella-Brodrick, D. A. (2011). Character Strengths Interventions: Building on What We Know for Improved Outcomes. *Journal of Happiness Studies*, 13, 1145-1163.
- Roberts, L.M., Dutton, J.E., Spreitzer, G.M., Heaphy, E.D., & Quinn, R.E. (2005). Composing the reflected best-self portrait: Building pathways for becoming extraordinary in work organizations. *The Academy of Management Review*, 30, 712-736.
- Russell, J. A. (2003). Core affect and the psychological construction of emotion. *Psychological Review*, 110, 145-172.
- Schaufeli, W.B. & Bakker, A.B. (2004). Job demands, job resources and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25, 293-315.
- Seligman, M.E.P. & Csikszentmihalyi, M. (2000). Positive psychology: An Introduction. *American Psychologist*, 55, 5-14.
- Seligman, M.E.P., Steen, T.A., Park, N., & Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist*, 60, 410-421.
- Spreitzer, Porath & Gibson (2012) Toward human sustainability: How to enable more thriving at work. *Organizational Dynamics*, 41, 155-162.
- Sweetman, D., & Luthans, F. (2010). The power of positive psychology: Psychological capital and work engagement. In A.B. Bakker & M.P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 54-68). New York: Psychology Press.
- Tadic, M., Bakker, A.B. & Oerlemans, W.G.M. (2013). Work happiness among teachers: A day reconstruction study. *Journal of School Psychology*, 51, 735-750.
- Tadic, M., Bakker, A.B. & Oerlemans, W.G.M. (2015). Challenge versus hindrance job demands and well-being: A diary study on the moderating role of job resources. *Journal of Occupational and Organizational Psychology*, 88, 702-725.
- Van der Heijden, B.I.J.M. (2005). *No one has ever promised you a rose garden. On shared responsibility and employability enhancing strategies throughout careers*. Inaugural lecture Open Universiteit Heerlen. Assen: Van Gorcum.
- Van der Klink, J.J.L., Brouwer, S., Bültmann, U., Burdorf, A., Schaufeli, W.B., Van der Wilt, G.J. & Zijlstra, F.R.H. (2010). *Duurzaam inzetbaar: een werkdefinitie [Sustainably employable: a working definition]*. 's-Gravenhage: ZonMw.
- Van Strien, P. (1997). Towards a methodology of psychological practice: The regulative cycle. *Theory & Psychology*, 7, 683-700.
- Van Woerkom, M. & Myers, M.C. (2015). My strengths count: Effects of a strengths-based psychological climate on positive affect and job performance. *Human Resource Management*, 1, 81-103.
- Van Woerkom, M., Oerlemans, W.G.M. & Bakker, A.B. (2015). Strengths use and work engagement: A weekly diary study. *European Journal of work and Organizational Psychology*, 25, 1-14.
- Verhulst, A. (2014). *The effects of a strengths-based intervention on Psychological Capital, organizational citizenship behaviour and innovativeness*. Master thesis Tilburg University.
- Xanthopoulou, D., Bakker, A.B., Demerouti, E., & Schaufeli, W.B. (2009). Work engagement and financial returns: A diary study on the role of job and personal resources. *Journal of Occupational and Organizational Psychology*, 82, 183-200.
- Xanthopoulou, D., Bakker, A.B., Heuven, E., Demerouti, E., & Schaufeli, W.B. (2008). Working in the sky: A diary study on work engagement among flight attendants. *Journal of Occupational Health Psychology*, 13, 345-356.

