



UNIVERSITY  
OF WOLLONGONG  
AUSTRALIA

University of Wollongong  
Research Online

---

SBS HDR Student Conference

---

Aug 6th, 11:30 AM - 12:15 PM

# The relationship of employee engagement and wellbeing to organisational and student outcomes

Aylin Dulagil

Follow this and additional works at: <http://ro.uow.edu.au/sbshdr>

---

Dulagil, Aylin, "The relationship of employee engagement and wellbeing to organisational and student outcomes" (2012). *SBS HDR Student Conference*. 1.

<http://ro.uow.edu.au/sbshdr/2012/papers/1>

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library:  
[research-pubs@uow.edu.au](mailto:research-pubs@uow.edu.au)

---

**Description**

Employee engagement is gaining popularity in management literature; however it remains an unclear and somewhat undifferentiated psychological construct. Self-determination theory (Deci & Ryan, 1985) outlines three basic psychological needs that enhance human flourishing and offers a potentially comprehensive framework for defining and predicting employee engagement. This paper reviews the literature surrounding employee engagement, well-being and perceived autonomy support in organisations. In doing so, this paper examines existing theories of employee engagement. Finally, this paper reviews the literature regarding the relationship between employee engagement and organisational outcomes.

**Location**

Innovation Campus, Mike Codd Building, 1st floor, Room 102

## **Exploring the relationship of employee engagement, perceived autonomy support and wellbeing to organisational outcomes.**

**Aylin Dulagil**

### **Abstract**

*Employee engagement is gaining popularity in management literature; however it remains an unclear and somewhat undifferentiated psychological construct. Self-determination theory (Deci & Ryan, 1985) outlines three basic psychological needs that enhance human flourishing and offers a potentially comprehensive framework for defining and predicting employee engagement. This paper reviews the literature surrounding employee engagement, well-being and perceived autonomy support in organisations. In doing so, this paper examines existing theories of employee engagement. Finally, this paper reviews the literature regarding the relationship between employee engagement and organisational outcomes.*

### **Introduction**

Work is a significant part of an individual's life and as a result, employee engagement and wellbeing at work are important concepts. Contemporary work increasingly involves knowledge work which requires greater engagement of employee's mental and emotional capability. In parallel, employees desire greater meaning and personal development from their work (Avolio and Sosik, 1999), a situation that suggests that employee engagement is a key factor in retaining employees and enhancing their productivity. Engaged employees are both cognitively and emotionally connected to their work and their workplace (Harter and Blacksmith, 2010). Measures of job and life satisfaction correlate by between .50 and .60 (Judge and Watanabe, 1993), with at least 25% of the variation in life satisfaction being accounted for by job satisfaction (Spector, 1997).

The relationship between employee characteristics and business outcomes is assumed to exist, yet the empirical research is limited. For example, engaged employees consistently produce at high levels (Meere, 2005) yet the unique contribution of employee engagement is unknown (Christian et al., 2011). In this paper, the construct of employee engagement is reviewed and evaluated. We also explore the concept of psychological well-being and perceived autonomy support in the workplace. Finally, we review the literature regarding a relationship between these concepts and business outcomes.

### **What is employee engagement?**

Employee engagement has recently received much attention in the popular human resources and management literature, however, remains a construct requiring further conceptualisation and clarification (Saks, 2006, Robinson et al., 2004, Macey and Schneider, 2008b). In the following section, we examine existing conceptualisations of engagement.

#### *Work engagement*

An early definition of employee engagement described it as "the individual's involvement and satisfaction with as well as enthusiasm for work" (p. 269, (Harter et

al., 2002). An early conceptualisation of employee engagement defines personal engagement as harnessing the “organisation members’ selves to their work roles” (Kahn (1990, p. 694). That is, individuals who are engaged experience a simultaneous and holistic connection with their work (physical, emotional and cognitive). This model proposes that individual and organisational factors influence the experience of work and that this experience drives work behaviour (presumably leading to performance outcomes).

#### *Utrecht Work Engagement Scale*

Another conceptualisation is that of ‘work engagement’, a motivational state regarding the relationship of an employee to his ‘work’ rather than to the ‘organisation’ (a difference between work engagement and employee engagement (Bakker and Leiter, 2010). Work engagement is defined as a “positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002b, pg. 74). Recent research suggests that vigor and dedication constitute the core dimensions of engagement (Gonzalez-Roma, Schaufeli, Bakker, & Lloret, 2006).

Vigor is characterized by high levels of energy and mental resilience while working, and persistence in the face of difficulties. Dedication is defined as a sense of significance, enthusiasm, inspiration, pride, and challenge. Absorption is fully concentrating and being happily engrossed in one’s work, such that time passes quickly and one has difficulties with detaching oneself from work.

#### *Job demands – resources model*

The Job Demands–Resources (JD–R) Model (Bakker, Demerouti, De Boer, & Schaufeli, 2003; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001), distinguishes between two broad categories of work characteristics. Job demands refer to physical, psychological, social, or organisational aspects of the job that require sustained physical and/or psychological (i.e., cognitive or emotional) effort and therefore maybe associated with certain physiological and/or psychological costs (Demerouti et al., 2001). Job resources refer to those physical, psychological, social, or organisational aspects of the job that may: reduce job demands and the associated costs; are functional in achieving work goals; and stimulate personal growth, learning, and development. The degree to which job demands or job resources are present in an employee’s environment will relate to either burnout and emotional exhaustion or enhanced work engagement.

#### *The relationship between engagement and job attitudes*

While employee engagement at first appears to be similar to, or to overlap, concepts such as job satisfaction, organisational commitment, and job involvement (Macey and Schneider, 2008b), the relationship between these concepts remains in dispute with some researchers finding it is not empirically demonstrated (Little and Little, 2006), and others finding evidence for some correlation between employee engagement and the above concepts. Macey and Schneider (2008) propose that engagement mediates the relationship between antecedents (such as job characteristics, leadership and personality traits) and outcomes (such as job, task and contextual performance).

Bakker and Leiter (2010) define engagement as a psychological state, and in doing so, position it as an individual and mediating factor between the antecedents and outcomes of engagement. Bakker and Leiter (2010) attempt to operationalise employee engagement as a specific concept, in contrast to Macey and Schneider (2008) and others (e.g. Christian et al, 2011, Kahn, 1990), who, in an attempt to solve the conceptual problem in the current research of employee engagement, suggest that employee engagement be used as an umbrella term to include a multitude of conceptualisations e.g. trait, state, behavioural, attitudinal.

Concepts analogous to employee engagement can also be defined as outcomes of employee engagement e.g. organisational commitment (defined as attitudes toward, or loyalty to, the employing organisation) (Price, 2007, Harter and Blacksmith, 2010) and job satisfaction (the emotional state resulting from the evaluation of one's job experiences) (Locke and Henne, 1986). The relationships amongst antecedents and consequences of engagement have not yet been well conceptualised, let alone studied (Macey and Schneider, 2008a). Such confusion between antecedents and outcomes adds to the lack of clarity surrounding the construct of employee engagement.

#### *State versus trait based conceptualisations of engagement*

There remains uncertainty around the definition of employee engagement as a trait, state or observable behaviour (Macey and Schneider, 2008b, Page and Vella-Brodrick, 2009). Recent research has shown that engagement demonstrates both between and within person differences (ie has both state and trait like characteristics) (Dalal et al., 2008). In a recent meta-analysis, Christian et al, (2011) conceptualised engagement as a unique overarching construct with discriminant validity over other similar job attitudes and found that a single dimension of work engagement (e.g. 'flow' was not supported).

#### *Voice engagement survey*

In a study examining 13 engagement related measures, Langford and colleagues (Langford, 2010; Langford & Demirian, 2007; Langford, Parkes & Metcalf, 2006) found strong evidence for an overall factor that split into two subcategories: items assessing attitudes and items assessing self-reported behaviour.

The attitudinal measures comprise existing constructs of job satisfaction, organisational commitment and intention to stay as indicators of employee engagement (cf Robertson, et al., 2012). The job satisfaction items encompass measures of vigor, dedication, and absorption, as well as positive affect and job satisfaction. The organisation commitment items measure level of attachment and loyalty towards the organisation, analogous to affective commitment (Rhoades et al., 2001).

Intention to stay (or leave) is a significant aspect of the Voice engagement scale and research has shown that measures of employee turnover, intention to quit or retention are a reliable indicator of employee attitudes to their workplace (Little and Little, 2006). For example, individuals are more likely to leave an organisation if their expectations are not met (Cotton and Tuttle, 1986). Such expectations have been found to include "interest in the type of job", "quality of manager", "opportunity to learn and grow", and indeed, an expectation of engagement (Harter and Blacksmith,

2010). Recent meta-analysis indicates that differences in turnover rates exist between highly engaged and highly disengaged employees (Harter et al., 2006).

A key finding from the Voice study was that the attitudinal measures outperformed the included behaviour measures (effort - organisational citizenship behaviour, discretionary effort, proficiency – encompassing in-role behaviours, adaptivity, individual citizenship behaviours, and proactivity) in correlating with organisational outcomes. For this reason, the Voice engagement survey tool focuses on measuring only the attitudinal measures of organisation commitment, job satisfaction and intention to stay, and excludes any behavioural measures (Langford, 2010). In this study, factors of employee engagement did not include well-being as a related construct to employee engagement. Further, this study measured organisational productivity through a self-reported rating by managers of business units (i.e. not an objective rating).

In the current study, employee engagement is conceptualised using the Voice engagement survey tool, as an attitudinal construct. However, we also include psychological well-being as a related construct and seek to further evaluate the relationship between psychological well-being and employee engagement. We also conceptualise employee engagement through the lens of self-determination theory and seek to examine the role that perceived autonomy support plays in contributing to employee engagement. Finally, the current study will evaluate the unique contribution that employee engagement makes to business well-being and outcomes.

### **Well-being**

Well-being is a global & subjective judgement that one is experiencing mostly positive, and relatively little negative emotions (Wright, 2005). The interpretation of the organisational environment in relation to an employee's well-being is the concept of psychological climate (Brown and Leigh, 1996). Research has consistently demonstrated significant associations between measures of employee well-being and job-related performance (.30 - .50) (Wright et al., 2007).

More recent research suggests that well-being and job satisfaction interact to predict whether an employee will leave or stay in their job i.e. the relationship between job satisfaction and retention was stronger in employees with high levels of well-being (Wright and Bonett, 2007). Well-being has a similar moderating effect between job performance and job satisfaction, such that job performance was highest when employees reported high scores on both well-being and job satisfaction (Wright et al., 2007). Well-being has been found to be correlated to affective organisational commitment (Meyer and Maltin, 2010).

There is evidence that people with higher levels of psychological well-being at work are more productive at work (e.g. Wright and Cropanzano, 2000). However, psychological well-being is not positioned as a key component of employee engagement (e.g. Harter et al., 2002; Schaufeli et al., 2006). A broader conceptualisation of employee engagement, that includes psychological well-being provides a more comprehensive definition of engagement for individuals (Meyer and Maltin, 2010) and organisations alike (Robertson and Cooper, 2010).

### **Self-determination theory**

Self-determination theory (SDT) involves a set of related theories that explain human behaviour by defining different types of motivation that an individual may engage in for a task or set of activities (Deci and Ryan, 1985).

In addition to defining different motivation states, SDT defines basic psychological needs that, when satisfied, provide the environment for intrinsic motivation and human fulfilment (Deci and Ryan, 1985). In SDT, satisfaction of the basic needs for autonomy, competence, and relatedness is considered a crucial condition for individuals' thriving (Deci and Ryan, 2000). These needs are considered to be primary, innate propensities and essential to individual's functioning (Deci and Ryan, 2000) and satisfaction of the three basic needs is posited to benefit all individuals and to be considered essential for optimal human functioning.

The need for autonomy is defined as an inherent desire to act with a sense of choice and volition, from personal interest, and to feel psychologically free (Deci and Ryan, 2000, Ryan and Deci, 2011, Ryan and Deci, 2002). The need for competence refers to mastering one's environment, feeling effective in ongoing interactions with the social environment and experiencing opportunities to use and express one's unique capacities (Ryan and Deci, 2002, Deci and Ryan, 2000). Finally, the need for relatedness refers to feeling connected with others and having a sense of belonging at both the individual and the community level (Ryan and Deci, 2002). Need for relatedness is satisfied if people maintain close and intimate relationships, feel part of a team and feel free to express their personal concerns and joys (Van den Broeck et al., 2008).

#### *Employee engagement and self-determination theory*

Employee engagement is closely linked to an employee's motivation. Self-determination theory (SDT) (Deci and Ryan, 1985) predicts that employees' perceptions of their managers' autonomy support will predict satisfaction of their intrinsic needs for competence, autonomy, and relatedness, and in turn will predict work performance and adjustment (Baard et al., 2004). Meyer and Gagne (2008) propose that SDT provides a unifying theory to underpin the concept of employee engagement and to explain some seemingly analogous findings in relations to employee engagement. The various motivational states described by SDT can be used to explain both the presence and absence of employee engagement (Meyer and Gagné, 2008).

Van den Broek et al., (2010) developed a workplace specific measure (W-BNS) of the three needs and validated it on a Dutch sample. This study found that satisfaction of each of the three needs was positively associated with job satisfaction and vigour, and negatively associated with exhaustion. In addition, satisfaction of the three needs was positively related to life satisfaction, with competence satisfaction and relatedness satisfaction being more strongly related to life satisfaction than to job satisfaction and vigour (respectively). In the same study, need satisfaction was found to relate positively to organisational commitment and self-reported performance (Van den Broeck et al., 2010). This provides further support that fulfilment of the basic needs in SDT is associated with elements that may contribute to employee engagement (i.e. vigour and job satisfaction).

Previous research has found that work-related need satisfaction is related positively to job resources and characteristics. Specifically, task autonomy has been found to be strongly correlated to autonomy satisfaction, whereas social support is strongly related to relatedness satisfaction (Van den Broeck et al., 2010, Van den Broeck et al., 2008). (Deci et al., 1989) found that when managers were more autonomy-supportive, their work-group members reported more overall job satisfaction. Blais and Brihe (1992) found similarly that when managers were perceived by their subordinates as more autonomy-supportive, the subordinates displayed greater job satisfaction, less absenteeism, and better psychological well-being.

A composite score of individual satisfaction across the three needs (Vansteenkiste et al., 2007) and the separate needs of competence and relatedness (Richer et al., 2002) were found to relate negatively to turnover intentions. However, only autonomy satisfaction seemed to prevent turnover (Van den Broeck et al., 2010, Vallerand et al., 1997). This finding is consistent with research in other life domains (e.g. autonomy satisfaction leading to fewer school drop-outs) (Vansteenkiste et al., 2005). Research demonstrates that lack of satisfaction of the three needs leads to poorer performance and reduced psychological well-being (Ryan and Deci, 2000). Moreover, need satisfaction is an important mediator in the relationship between environmental influences (e.g. leadership) and autonomous regulation (Gagne and Deci, 2005).

The current study will examine the relationship between measures of employee engagement and perceived autonomy support to further clarify the relationship. SDT predicts that higher perceived autonomy support (i.e. fulfilment of basic needs of autonomy, competence, and relatedness) will be related to higher employee engagement.

#### *Self-determination theory and well-being*

Various theories of psychological well-being have included elements of self-determination theory (e.g. autonomy, environmental mastery, positive relations with others, personal growth, purpose in life, self-acceptance) (Ryff, 1995). Research demonstrates that satisfaction of all three psychological needs are associated with higher well-being across age, cultural dimensions (Hahn and Oishi, 2006), and across the lifespan (Kasser and Ryan, 1999). Several studies, across different life domains, have provided evidence for this claim (e.g., (Deci and Ryan, 2008). Deci et al. (2001) assessed satisfaction of the three needs at work (in Bosnia and the USA) and found direct positive relations in both countries between the degree of need satisfaction, and both work engagement and well-being on the job. Kasser and Ryan (1999) found that satisfaction of autonomy and relatedness needs in residents of a nursing home were positively related to their well-being and perceived health.

Early evidence has been found for correlations between need satisfaction of the three needs and employees' general (Deci and Ryan, 2000, Baard et al., 2004), and work-related well-being (i.e., job satisfaction, work engagement, and lower burnout), favourable attitudes (i.e., decreased turnover intentions, increased readiness to change), higher performance (Van den Broeck et al., 2010), and optimal functioning (Lynch, Plant, & Ryan, in press, cited Gagne & Deci, 2005). Satisfaction of basic needs has been found to predict psychological health, even after controlling for employees' salary and organisational status (Ilardi et al., 1993). Employees' reports



of satisfaction of their basic needs in the workplace relate positively to self-esteem, general health, and vitality, and inversely to anxiety (Baard et al., 2004).

More specifically, autonomy-supportive leadership style has a positive impact on employees' well-being and performance (Baard et al., 2004, Van den Broeck et al., 2008, Deci et al., 1989, Breugh, 1985). Studies have found that managers' autonomy support led to greater satisfaction of the needs for competence, relatedness, and autonomy and, in turn, to more job satisfaction, higher performance evaluations, greater persistence, greater acceptance of and motivation for organizational change, and better psychological adjustment (Baard et al., 2004, Deci et al., 2001, Gagne et al., 2000, Ilardi et al., 1993, Kasser et al., 1992)

In addition to relating to employees' optimal functioning, basic need satisfaction is also useful in understanding the impact of supervisors' leadership styles (Deci et al., 2001) and job characteristics (Van den Broeck et al., 2008), and their impact on employees' well-being and performance.

### **Organisational outcomes**

An engaged employee, who dedicates physical, cognitive and emotional resources to their work, should translate into higher levels of both task and contextual performance (Christian et al, 2011). However, we know little about engagement's uniqueness as a predictor of job performance (Christian et al., 2011). For example, no significant predictive relationship has been found between employee engagement and discretionary effort, a key related outcome for organisations (Shuck et al., 2011), despite a long-standing assumption that employee engagement would predict discretionary effort.

Employee engagement is usually measured and discussed at the organisational level, whereas most research examining organisational outcomes and performance occurs at the divisional unit level. Meta-analytic studies looking at correlations between employee engagement (Harter et al., 2002) or employee well-being and a range of limited business outcomes including turnover, customer satisfaction, profit and productivity (Harter et al., 2003), have found evidence of correlation (measured at the business unit level). This research will examine performance outcomes at both the organisational and divisional unit level.

### **Summary**

Employee engagement is a concept requiring further research and clarification. A relationship between employee engagement and organisational outcomes has long been assumed and theorised to exist however, the evidence for a causal relationship is patchy at best. This paper has reviewed the literature regarding employee engagement, well-being and perceived autonomy support to contribute further to clarifying the concept of employee engagement and its relationship to organisational outcomes.

## References

- AVOLIO, B. J. & SOSIK, J. J. 1999. A life-span framework for assessing the impact of work on white-collar workers. In: REID, S. L. W. J. D. (ed.) *Life in the Middle*. San Diego, CA: Academic Press.
- BAARD, P. P., DECI, E. L. & RYAN, R. M. 2004. Intrinsic Need Satisfaction: A Motivational Basis of Performance and Well-Being in Two Work Settings1. *Journal of Applied Social Psychology*, 34, 2045-2068.
- BAKKER, A. B. & LEITER, M. P. 2010. Work Engagement : A Handbook of Essential Theory and Research. 1 ed. Hoboken: Psychology Press.
- BREAUGH, J. A. 1985. The measurement of work autonomy. *Human Relations*, 38, 551-570.
- BROWN, S. P. & LEIGH, T. W. 1996. A new look at psychological climate and its relationship to job involvement, effort, and performance. *Journal of Applied Psychology*, 81, 359 - 68.
- CHRISTIAN, M. S., S., G. A. & E., S. J. 2011. Work engagement: A quantitative review and test of its relations with task and contextual performance. . *Personnel Psychology*, 64, 89-136.
- COTTON, J. L. & TUTTLE, J. M. 1986. Employee turnover: A meta-analysis and review with implications for research. . *Academy of Management Review*, 11, 55-70.
- DALAL, R. S., BRUMMEL, B. J., WEE, S. & THOMAS, L. L. 2008. Defining employee engagement for productive research and practice. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 1, 52-55.
- DECI, E. L., CONNELL, J. P. & RYAN, R. M. 1989. Self-determination in a work organization. *Journal of Applied Psychology*, 74, 580-590.
- DECI, E. L. & RYAN, R. M. 1985. The general causality orientations scale: Self-determination in personality. *Journal of Research in Personality*, 19, 109-134.
- DECI, E. L. & RYAN, R. M. 2000. The support of autonomy and the control of behavior. *Higgins, E Tory (Ed)*, 128-145.
- DECI, E. L. & RYAN, R. M. 2008. Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology/Psychologie canadienne*, 49, 182-185.
- DECI, E. L., RYAN, R. M., GAGNE, M., LEONE, D. R., USUNOV, J. & KORNAZHEVA, B. P. 2001. Need satisfaction, motivation, and well-being in the work organizations of a former Eastern bloc country: A cross-cultural study of self-determination. *Personality and Social Psychology Bulletin*, 27, 930-942.
- GAGNE, M. & DECI, E. L. 2005. Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26, 331-362.
- GAGNE, M., KOESTNER, R. & ZUCKERMAN, Z. 2000. Facilitating Acceptance of Organizational Change: The Importance of Self-Determination. *Journal of Applied Social Psychology*, 30, 1843-1852.
- HAHN, J. & OISHI, S. 2006. Psychological needs and emotional well-being in older and younger Koreans and Americans. . *Personality and Individual Differences*, 40, 689-698.
- HARTER, J. & BLACKSMITH, N. 2010. Employee engagement and the psychology of joining, staying in, and leaving organizations. In: LINLEY, P. A. E. (ed.) *Oxford Handbook of Positive Psychology at Work*. Oxford: Oxford University Press.
- HARTER, J. K., SCHMIDT, F. L. & HAYES, T. L. 2002. Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87, 268-279.

- HARTER, J. K., SCHMIDT, F. L. & KEYES, C. L. 2003. Well-being in the workplace and its relationship to business outcomes: A review of the Gallup studies. *Keyes, Corey L M (Ed)*, 205-224.
- HARTER, J. K., SCHMIDT, F. L., KILHAM, E. A. & ASPLUND, J. W. 2006. Q12 meta-analysis. The Gallup Organisation.
- ILARDI, B. C., LEONE, D., KASSER, T. & RYAN, R. M. 1993. Employee and supervisor ratings of motivation: main effects and discrepancies associated with job satisfaction and adjustment in a factory setting. *Journal of Applied Social Psychology*, 23, 1789-1805.
- JUDGE, T. A. & WATANABE, S. 1993. Another look at the job satisfaction-life satisfaction relationship. *Journal of Applied Psychology*, 78, 939-948.
- KASSER, T., DAVEY, J. & RYAN, R. M. 1992. Motivation and employee-supervisor discrepancies in a psychiatric vocational rehabilitation setting. *Rehabilitation Psychology*, 37, 175-188.
- KASSER, V. & RYAN, R. 1999. The relation of psychological needs for autonomy and relatedness to health, vitality, well-being and mortality in a nursing home. *Journal of Applied Social Psychology*, 29, 935-954.
- LITTLE, B. & LITTLE, P. 2006. Employee engagement: Conceptual issues. *Journal of Organizational Culture, Communications and Conflict*, 10, 111-120.
- LOCKE, E. A. & HENNE, D. 1986. Work motivation theories. In: COOPER, C. L. & ROBERTSON, I. (eds.) *International review of industrial and organizational psychology*. London: Wiley.
- MACEY, W. H. & SCHNEIDER, B. 2008a. The Meaning of Employee Engagement. *Industrial & Organizational Psychology*, 1, 3-30.
- MACEY, W. H. M., 2008 # 105} & SCHNEIDER, B. 2008b. The meaning of employee engagement. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 1, 3-30.
- MEYER, J. P. & GAGNÉ, M. 2008. Employee Engagement From a Self-Determination Theory Perspective. *Industrial and Organizational Psychology*, 1, 60-62.
- MEYER, J. P. & MALTIN, E. R. 2010. Employee commitment and well-being: A critical review, theoretical framework and research agenda. *Journal of Vocational Behavior*, 77, 323-337.
- PAGE, K. M. & VELLA-BRODRICK, D. A. 2009. The 'What', 'Why' and 'How' of Employee Well-Being: A New Model. *Soc Indic Res* 90.
- PRICE, A. 2007. *Human Resource Management in a Business Context* Thomson Learning.
- RHOADES, L., EISENBERGER, R. & ARMELI, S. 2001. Affective commitment to the organisation: The contribution of perceived organizational support. *Journal of Applied Psychology*, 86, 825 - 36.
- RICHER, S. F., BLANCHARD, C. & VALLERAND, R. J. 2002. A motivational model of work turnover. *Journal of Applied Social Psychology*, 32, 2089-2113.
- ROBERTSON, I. T. & COOPER, C. L. 2010. Full engagement: The integration of employee engagement and psychological well-being. *Leadership & Organization Development Journal*, 31, 324-336.
- ROBINSON, D., PERRYMAN, S. & HAYDAY, S. 2004. *The Drivers of Employee Engagement*. Brighton: Institute for Employment Studies.
- RYAN, R. M. & DECI, E. L. 2000. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78.
- RYAN, R. M. & DECI, E. L. 2002. An overview of self-determination theory: An organismic-dialectical perspective. In: DECI, E. L. & RYAN, R. M. (eds.)

- Handbook of self-determination research*. Rochester: University of Rochester Press.
- RYAN, R. M. & DECI, E. L. 2011. A self-determination theory perspective on social, institutional, cultural, and economic supports for autonomy and their importance for well-being. *Human autonomy in cross-cultural context: Perspectives on the psychology of agency, freedom, and well-being*. New York, NY: Springer Science + Business Media; US.
- SAKS, A. M. 2006. Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21, 600-619.
- SHUCK, B., REIO, T. G. & ROCCO, T. S. 2011. Employee engagement: an examination of antecedent and outcome variables. *Human Resource Development International*, 14, 427-445.
- SPECTOR, P. E. 1997. *Job satisfaction: Application, assessment, causes, and consequences*. Thousand Oaks, CA, Sage.
- VALLERAND, R. J., FORTIER, M. S. & GUAY, F. 1997. Self-determination and persistence in a real-life setting: Toward a motivational model of high school dropout. *Journal of Personality and Social Psychology*, 72, 1161-1176.
- VAN DEN BROECK, A., VANSTEENKISTE, M., DE WITTE, H. & LENS, W. 2008. Explaining the relationships between job characteristics, burnout, and engagement: The role of basic psychological need satisfaction. *Work & Stress*, 22, 277-294.
- VAN DEN BROECK, A., VANSTEENKISTE, M., DE WITTE, H., SOENENS, B. & LENS, W. 2010. Capturing autonomy, competence, and relatedness at work: Construction and initial validation of the Work-related Basic Need Satisfaction scale. *Journal of Occupational and Organizational Psychology* 83, 981-1002.
- VANSTEENKISTE, M., NEYRINCK, B., NIEMIEC, C. P., SOENENS, B., DE WITTE, H. & VAN DEN BROECK, A. 2007. On the relations among work value orientations, psychological need satisfaction and job outcomes: A self-determination theory approach. *Journal of Occupational and Organizational Psychology*, 80, 251-277.
- VANSTEENKISTE, M., ZHOU, M., LENS, W. & SOENENS, B. 2005. Experiences of Autonomy and Control Among Chinese Learners: Vitalizing or Immobilizing? *Journal of Educational Psychology*, 97, 468-483.
- WRIGHT, T. A. (ed.) 2005. *The role of "happiness" in organizational research: Past, present, and future directions*. , Amsterdam: JAI Press.
- WRIGHT, T. A. & BONETT, D. G. 2007. Job satisfaction and psychological well-being as nonadditive predictors of work-place turnover. *Journal of Management Development*, 33, 141-160.
- WRIGHT, T. A., CROPANZANO, R. & BONETT, D. G. 2007. The moderating role of employee positive well-being on the relation between job satisfaction and job performance. *Journal of Occupational Health Psychology*, 12, 93-104.