

The importance of external variables in determining Employee engagement and its dynamic nature. A literature review.

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Abstract

Research demonstrates that high levels of Employee's Engagement (EE) sustain individuals' job satisfaction and performance (both in-role and extra-role). This literature review analyses the evolution of EE, highlighting the principal antecedents progressively considered in relation to It and the dynamic conceptualization of engagement. This work relies on a mixed methods research design that combines the rigor, transparency, and reproducibility of a systematic review protocol with more qualitative considerations. Two main findings emerge from the analysis. First, the importance of social and organizational antecedents of EE, as suggested by the latest contributions on the topic. Second its dynamic nature that, combined to modern digital technologies, open up innovative approaches to study the phenomenon. We discuss the implications of these findings, highlighting the necessity of rethinking EE in relation to the new normal after Covid19 in which remote working is increasingly relevant.

1. Introduction

During the last decades, several scholars, mainly coming from the fields of psychology, human relations, organizational behaviour and management, have long analysed the topic of Employee's Engagement (EE) together with its antecedents and outcomes. Research has shown that high levels of EE sustain individuals' job satisfaction, adaptivity and creativity (Eldor and Harpaz, 2016; Saks, 2006) and lead not only to higher productivity, profitability and customer satisfaction, but also to lower absenteeism and turnover (Harter et al., 2002).

In relation with its outcomes, it has been observed that EE has a positive impact on both employees and organizations. In fact, monitoring and fostering engagement, it is not merely key in enhancing the general wellbeing of employees, but also in achieving organizational goals (Tims et al., 2013; Brauchli et al., 2013; Hu et al., 2011).

Through this literature review we produce two main contributions. First, and partially in contrast with Bakker (2011), who highlighted how job and personal resources were the main predictors of EE, we underline the strong impact on EE of external variables represented by social interaction and organizational context. With social interaction we refer to those social relational variables such as social support, certain styles of leadership and the relationship between colleagues and supervisor, whereas with organizational context we refer to those organizational variables related mainly with the policies adopted by an organization, and that can influence the job of employees.

Second, considering the dynamic nature of relational antecedents, we highlight a more dynamically conceptualization of EE. Despite "most of the research conceptualizes engagement as a relatively stable individual difference" (Christian et al., 2011: 94), recent contributions are increasingly focusing on the constructs of state and momentary work engagement (Bakker et al., 2019; Breevaart et al., 2012). Building on

Kahn's (1990) intuition that engagement varies not only between individuals but also within the same person, literature has recently started a debate centred around a more dynamic conceptualization, and consequently operationalization and measurement, of the construct (Macey and Schneider, 2008; Breevaart et al., 2012).

Based on our findings, we suggest possible promising research directions, addressing the dynamic, contextual and relational nature of EE in relation to the current situation due to Covid19. This unexpected event has changed the way we work, shifting the workspace from a physical to a virtual space and, thus, changing the way of interacting with the context and own colleagues, leader, and costumers, requiring to re-investigate the relationship between EE and contextual variables.

2. Method

This work relies on a mixed methods research design that combines the rigor, transparency, and reproducibility of a systematic review protocol with more qualitative considerations (Tranfield et al., 2013) for analysing the literature, which best suit the research objectives (Zupic and Čater, 2015).

2.1. Data collection

Our research relies on Scopus, one of the most used databases in management discipline (Zupic and Čater, 2015). Following Tranfield et al. (2013), we performed an initial analysis of the literature that supported the selection of the search keywords and the identification of the broad scientific areas discussing the topic of EE. We searched the terms "employee engagement", "work engagement", "job engagement" and "personal engagement" (this last term was included because Kahn used this taxonomy in his first paper on the topic) in articles' title, keywords and abstract. We found 6,892 documents (Searched on October 15th, 2020). We limited our research to articles, reviews and conference papers written in English and selected the subject areas according to multidisciplinary and inclusive *criteria*. We have considered the following ones: business and management, social science, psychology, medicine, economy, arts and humanities, engineer, computer science and decision science.

The first relevant contribution on engagement has been provided by Kahn in 1990 and, thus, we collected documents starting from this year. From the analysis of the literature, and as depicted in Figure 1, we noticed that probably the interest on the topic is grown from the conceptualization of Schaufeli et al. (2002).

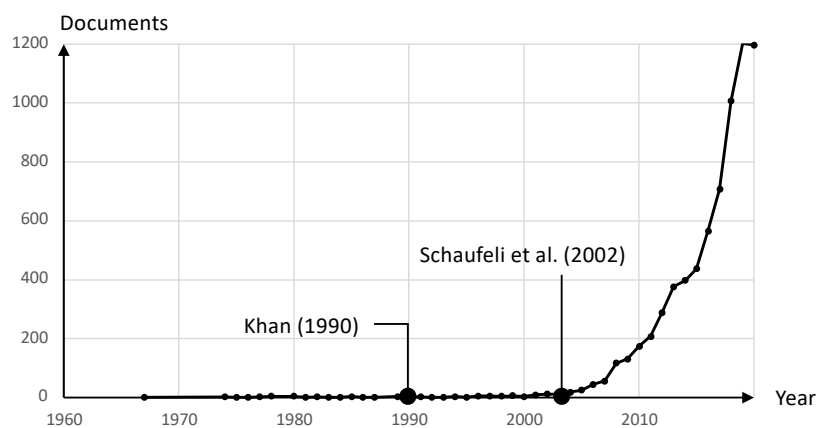


Figure 1. Documents on Scopus on employees' engagement subdivided per year

Finally, considering the remarkable number of papers identified, and seeking to select the articles with high theoretical and methodological robustness, we considered only the papers published in top journals (ranked as 4 and 4* in the ABS Academic Journal Guide). With the application of all filters, Scopus database retrieved 369 documents. At this point, two independent researchers read the abstract of each article for limiting the scope of our review to works considering EE as a central topic, obtaining a final dataset composed by 112 papers.

After reading the first articles, we have decided to add to our dataset 5 further documents very cited and relevant but not included in our previous final dataset. An example of these articles is the one written by Schaufeli et al. (2002). The final full text's body was thus composed of 117 documents, as indicated in Figure 2.

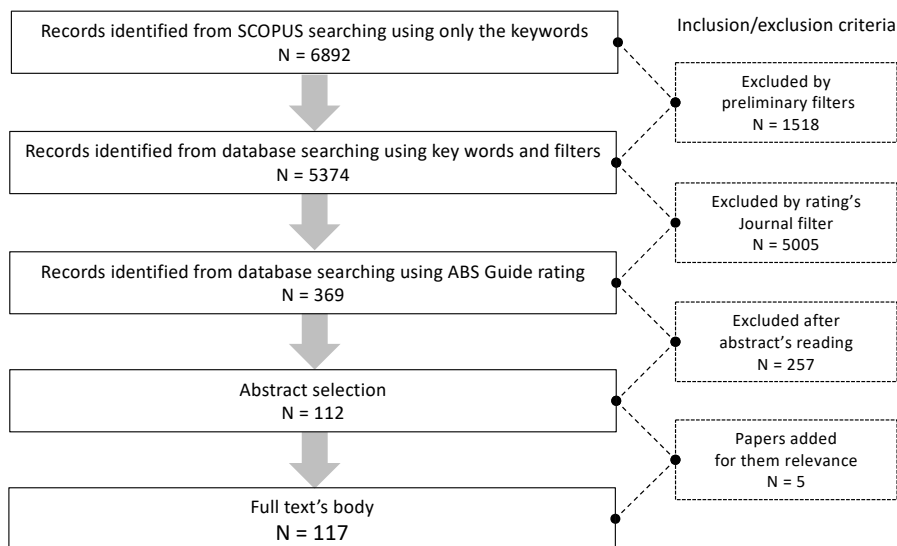


Figure 2. Systematic search path for the development of the full text's body

For better understanding and synthesizing the corpus of knowledge, we have gathered some information regarding all papers through the schema represented in Table 1. As indicated in the table, we evaluated the relevance of each document from “1” to “3”, where “1” indicated those papers in which EE was debated as an exclusive focus topic and analysed in relation with its antecedents and outcomes; whereas “3” has been given to all papers that touched EE indirectly, for example as an outcome of other constructs.

Table 1. Criteria used to classify the papers

| | |
|-------------------------|--------------------------|
| <i>Main Information</i> | ID |
| | Title |
| | Authors |
| | Source |
| | ABS guide classification |
| | Year |
| | Citation |
| | Keywords |
| | Abstract |
| | Topic |

| | |
|--|-----------------------------|
| | Area journal |
| <i>Definitions</i> | Definition of engagement |
| <i>Theoretical Frameworks</i> | Theoretical frameworks used |
| <i>Type of Study</i> | Theoretical |
| | Empirical |
| | Meta-analysis |
| | Qualitative |
| <i>Type of Survey</i> | Survey |
| | Daily survey |
| <i>Measure scales</i> | Measure scales adopted |
| <i>Dynamic Approach</i> | Daily work engagement |
| | Momentary work engagement |
| <i>Variables studied in relation to EE</i> | Antecedents |
| | Outcomes |
| | Mediators |
| | Moderators |
| <i>Additional Information</i> | Relevance to our study |
| | Notes |

3. Results

In line with Figure 1, in which was represented the increasing interest on the topic over the years, also the papers selected in our review, depicted in Figure 3, show a growing interest towards EE.

Observing the scientific area of the papers over the years it is possible verifying that, if initially the topic was discussed mainly in psychology journals, in last decade also authors in other disciplines – such as organisational behaviour, HR and management – have increasingly approached the topic (Figure 3).

EE is a social phenomenon that we can observe and measure empirically within a work context. Giving this consideration and being one of our research objectives the investigation of those variables that impact and are affected by EE, 100 papers are empirical research, 11 are theoretical papers, 5 are literature reviews and 1 a qualitative study.

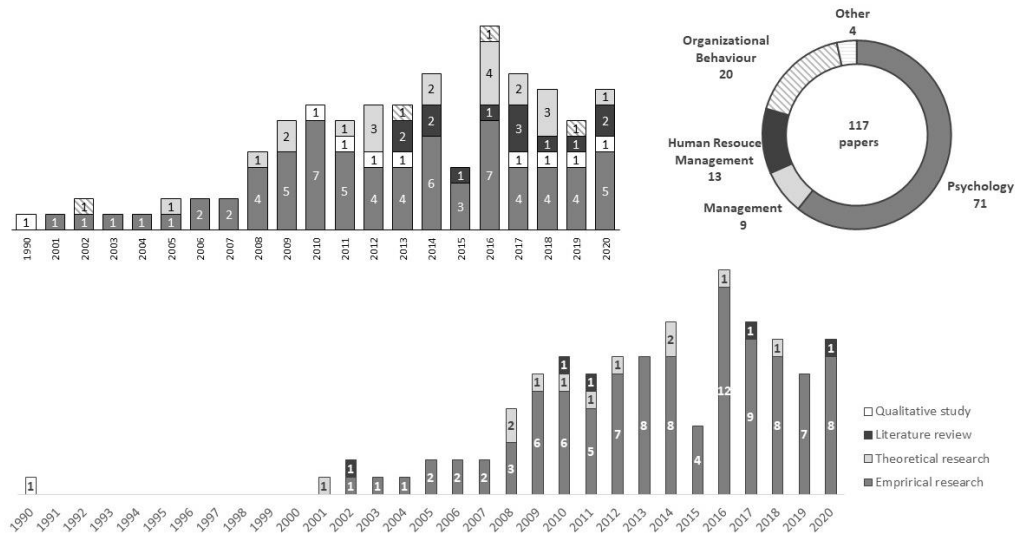


Figure 3. Scientific area and type of study of the papers on employees' engagement

3.1. Conceptual evolution

It is not always easy to understand the concept of EE since, on the one hand, it is often confused with other similar constructs – such as job satisfaction, organizational commitment, job involvement and flow – while, on the other hand, it does not exist a common, shared conceptualisation of it (Macey, 2008; Bakker, 2011). This confusion further growth in the operationalization of the construct (Byrn, 2016; Shuck et al., 2017). It is thus necessary distinguishing EE from other similar constructs.

Job Satisfaction (JS) is an attitude often defined as a “positive (or negative) evaluative judgment one makes about one’s job or job situation” (Weiss, 2002, p. 175). JS and EE differ because the latter refers to a state of activation, whereas JS leads to a sensation similar to satiation (Christian et al., 2011; Erickson, 2005; Macey and Schneider, 2008). In addition, JS is an evaluative description of a job characteristic, whereas EE concerns more the individual’s experiences during the worktime (Christian et al., 2011).

Organizational Commitment (OC) is characterized by an emotional attachment to one’s organization for which employees share values and interests (Christian et al., 2011). While OC refers to an affective attachment towards principles and values shared by an organization, EE is the result of perceptions that are based on the work itself (Christian et al., 2011; Maslach et al., 2001). Further, EE concerns the cognitive, emotional, physical, and psychological dimension related to work, whereas OC represents just the emotional state of attachment toward organization (Christian et al., 2011; Schineder Masley 2008).

Job Involvement (JI) has been defined by Kanungo (1982) as a “cognitive or belief state of psychological identification” (p. 342). JI concerns the cognitive belief that a job satisfies one’s personal needs, and it shows the degree at which an individual identifies himself with a job role, not only during working time but also in other settings (Christian et al., 2011). In this sense, JI differs from EE because it is just a cognitive construct, whereas EE included more dimensions; second, JI is not delimited to work tasks, but it refers how job is central to an individual’s identity and satisfy their own needs (Christian et al., 2011). Kühnel et al. (2009) shown how JI has the double-edged sword effect on EE; on one hand they have shown that, through psychological

detachment, JI could have a positive impact on EE; on the other hand, if an employee is always immersed in work without detach himself from it, JI could impact negatively on EE.

Another similar construct is represented by the conceptualisation of flow (Bakker et al., 2010). Flow is a positive state of mind that we can experience not only in our work but more generally in different activities over the day. Despite it shares the dimension of absorption with EE, it is a momentary and volatile state.

Having clarified what EE is not, Table 2 synthesises the various conceptualisations of the construct. The first relevant contribution is from Kahn (1990), who defines engagement as “*the harnessing of organization members’ selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances*”. According to the author, personal engagement is influenced by job features, people with whom employee interacts and the organizational context. He also claimed that engaged people show their own thought, beliefs, feeling, values and creativity in their job role, adding that engaged people are characterized by both dimensions of self-employment and self-expression (Kahn, 1990).

Table 2. Relevant definitions of employee’s engagement

| Source | Citations* | Definition |
|-------------------------|-------------------|---|
| Kahn, 1990 | 3,092 | The harnessing of organization members’ selves to their work roles; in engagement people employ and express themselves physically, cognitively, and emotionally during role performances |
| Maslch and Leiter, 1997 | 6,464** | Engagement is characterised by energy, involvement, and efficacy, the direct opposite of the three burnout dimensions of exhaustion, cynicism, and inefficacy |
| Schaufeli et al., 2002 | 10,102** | A positive fulfilling, work-related state of mind that is characterised by vigour, dedication and absorption |
| Saks, 2006 | 1,692 | A sum of job and organizational engagement |
| Shuck et al., 2017 | 35 | An active, work-related positive psychological state operationalised by the intensity and direction of cognitive, emotional, and behavioural energy an employee directs toward positive organizational outcomes |

* On Scopus on February 1st 2021

** On Google Scholar on February 1st 2021

Self-employment refers to the investment of personal energies in work, whereas self-expression refers to the manifestation of own identity into job role. Regarding these premises, Kahn (1990) highlighted the three psychological conditions for achieving personal engagement: meaningfulness, psychological safety and availability.

Meaningfulness takes in consideration all the aspects tied to the job itself, including task characteristics, role characteristics and work interactions. Psychological safety concerns the possibility to work and act without fear of making mistakes, the social norms and the social dynamics between persons and groups and it composed by: interpersonal relationship, group and intergroup dynamics, management style and

process and organisational norms. Availability refers to personal energies such as physical one, emotional one, individual security and outside life (Kahn, 1990).

After Kahn's seminal work, scholars introduced several additional conceptualizations of EE, each framing into a different theoretical background and with different measurement scales (Christian et al., 2011; Shuck et al., 2017). Initially, engagement was studied in opposition to the concept of burnout. Maslach and Leiter (1997), defined EE as a construct composed by energy, involvement, and efficacy, considered as the three opposite factors of burnout, respectively exhaustion, cynicism, and lack of professional efficacy (Maslach and Leiter, 1997). In this view, engagement and burnout are studied and analysed as two opposite of the same dimension, which defines the general wellbeing of employees.

Starting from this consideration, Schaufeli et al. (2002) arrived to conceptualise EE as a single separate construct, defining it as "a positive, fulfilling, work-related state of mind that is characterized by vigour, dedication, and absorption". Vigour is characterised by high levels of energy, willingness to put effort into the job, and persistence during difficulty moments. Dedication implies enthusiasm, inspiration, awareness, proud and to feel challenged by the job. Absorption is the quality of being fully concentrated and focused on the job; time passes quickly, and it is possible to have difficulties to detach themselves from work (Schaufeli et al., 2002). The literature review highlighted that the conceptualisation due to Schaufeli and colleagues is the most shared and cited – both in psychology and management fields.

Later, Saks (2006) defined EE as the result of two forms: job and organisational engagement. Job engagement is more individual and focused on the characteristics of the job and the person. Organisational engagement is more related to the context and the organizational structure in which engagement is exercised. Saks noticed that the models offered by Kahn (1990) and Maslach and Leiter (1997) explained only the psychological conditions behind engagement, but not why people respond with different level of engagement. In order to deepen this aspect, he grounded his definition into social exchange theory (Cropanzano and Mitchell, 2005).

Another definition of EE has been proposed by Shuck et al. (2017), who provided a definition and a measure that consider both the academic as well as the managerial literature (Shuck and Wollard, 2010).

3.1. Drivers of employee engagement

To help us in the identification of the large number of antecedents, we have tried to include each variable in larger categories, aware that many of them are interconnected and simultaneously gathered in more dimensions.

In line with this previous consideration, we have divided antecedents in eight categories that could contain different drivers in more inclusive and wide categories, which are respectively: personal resources, job characteristics, social relations, organizational resources, positive emotions, recovery and respite activities, engagement (the own or from another person) and other.

With personal resources we intend all those variables related to a personality, psychological aspects, and the way of being and acting of a single individual. Job characteristics refer to those aspects related to the job-role occupied such as tasks. Social relations represent all those variables that involve a relation between two or more parts. Organizational resources refer to aspects concerning the organization itself and the ways with which impact on engagement of employees. Positive emotions concern those emotions that affect positively an employee over the workday. Recovery and

respite activities refer to those actions carry out by individuals both during the workday and outside work.

The papers of our dataset that have analysed EE in relation with its antecedents are 79. Of these, 34 have studied variables regarding social relations and interactions; 27 have focused on the job characteristics; 25 have studied antecedents referring organizational aspects; 19 have analysed personal resources; 7 were focused on variables regarding recovery and respite activities; 4 have taken in considerations respectively positive emotions and the influence of engagement itself (figure 4).

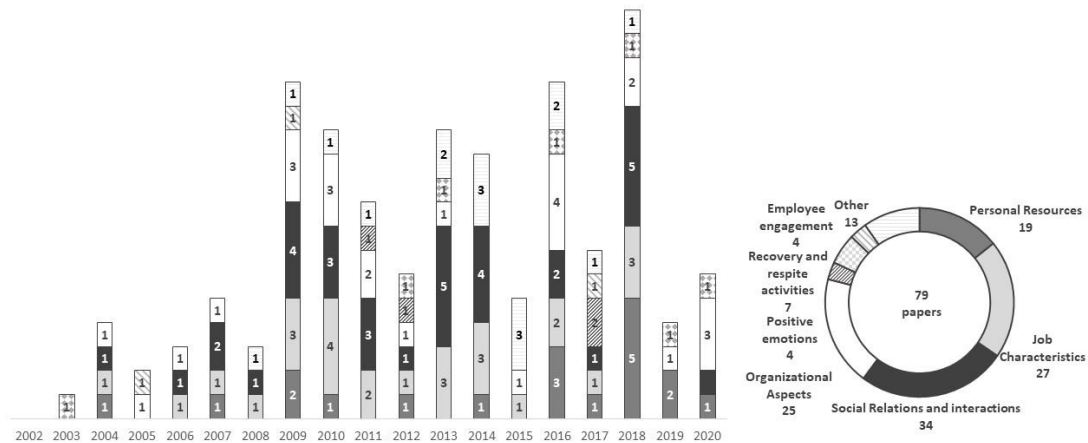


Figure 4. Relevant antecedents studied in relation to employee engagement.

Social relations represent all those variables that involve a relation between two or more parts that can influence the degree of engagement. Many studies have tested how social interactions impact on EE. It is possible identifying different kind of relations: with colleagues, with leader, with costumers and with family. All these kind of relations have an impact on EE. For instance, studies have shown that feedback from supervisor have a good impact on engagement as well as the good relations with colleagues (McGrath et al. 2017; Xanthopoulou et al. 2008). At the same time, even the relations with family members can influence the level of engagement (Siu O.-L et al. 2010). In particular many studies have focused on the relationship between supervisor and employee, showing how certain kind of approach such as transformational leadership have a good impact on EE, both directly (Schmitt et al., 2016; Breavaart et al, 2014) and indirectly, for instance mediating the relationship between the daily job demands and daily work engagement, as shown by Breavaart and Bakker (2018). Coherently to the spillover theory, the groups and more specifically the work role and the domestic role can influence each other in relation to EE, both positively and negatively, causing the crossover effect (Siu O.-L et al. 2010; Bakker et al. 2005).

Other important antecedents that positively impact on EE refer exclusively to aspects related to the job characteristics, referring to those aspects related to the job-role occupied such as tasks. Research has shown that some job aspects like job autonomy and task significance have a strong a positive impact on EE (Hakanen et al. 2008; Schaufeli et al. 2009; Brauchli et al. 2013; Byrne et al. 2016). Job autonomy concerns flexibility and freedom in management the own job (Xanthopoulou et al

2009); task significance is certainly related to the job that we do, but it involves also other aspects regarding our values, beliefs and the communication with the organization and supervisor (Goštautaitė et al., 2015). With organizational resources we refer to aspects concerning the organization itself and the ways with which impact on EE, such as all those actions implemented by an organization and even how these actions are perceived by employees. For instance, some research has shown the positive relation between rewards, transformational leadership and EE (Breevaart et al. 2014; Tims et al. 2011). At the same time, other papers have demonstrated that a good perception of the HR policies (e.g. professional development and justice) conduct to high levels of EE (Zhong et al. 2016; Alfes et al. 2013; Brauchli et al. 2013;). Recently, Dlouhy and Casper (2020) have shown the negative impact of downsizing effect on the engagement of survived employees through the supervisor support and the opportunity of development, highlighting how certain choices by organizations can reduce the degree of engagement. These considerations lead us to understand that organizations have a real impact on EE – both direct, through actions, and indirect, through employees' perception of organization role (Zhong et al. 2016; Alfes et al., 2013; Schaufeli et al., 2009).

With personal resources we intend those traits that belong to human being's personality and experience. Studies have shown that some personal resources can impact positively JRs and directly or indirectly also EE. For instance, self-efficacy (i.e. people's beliefs about their capabilities to control events that affect their lives; Bandura, 1989), organizational-based self-esteem (i.e. employees' beliefs that they can satisfy their needs by participating in roles within the organization; Pierce, Gardner, Cummings, and Dunham, 1989), and optimism (i.e. the tendency to believe that one will generally experience good outcomes in life; Scheier, Carver, and Bridges, 1994) are three of the most personal resources studied in relation with EE (Xanthopoulou et al 2009; Weigl et al. 2010). Latest research focuses on job crafting, intended as the capability of employees to rebuild and rethink their own job, as antecedent of EE (Bakker et al. 2019; Tims et al. 2013). Also, job crafting is influenced by a personal resource as proactive attitude, which led people to act autonomously in order to enhance their own aspect of life like work.

Recovery and respite activities refer to those actions carry out by individuals both during the workday and outside work. Several studies demonstrate that job detachment, which can be realised with night recoveries, day offs or vacancies, has a good impact not only in preventing burnout but also on fostering EE (Kühnel et al., 2009; Sonnentag, 2003). At the same time, even taking breaks and doing respite activities during the workday, as mindfulness for instance, can positively impact on own level of engagement (Chong et al., 2020).

Finally, there are other variables positive such as emotions and the work engagement itself (the own or from another person) that positively impact EE. Positive emotions as happiness, enthusiasm, relaxation and vitality, which could be influenced by both endogenous and exogenous factors, have a positive on engagement (Ouweneel et al 2012). The positive emotions are analysed in research that studies engagement with a dynamic approach; in fact, emotions could have an instant impact and thus influence the daily work engagement. Gutermann and colleagues (2017) have demonstrated how the engagement coming from the supervisor could affect positively the engagement of employees; while Bakker and colleagues (2005) have studied and shown that it exists a relationship of reciprocal influence between the own degree of engagement and that of own partner.

3.2. State and momentary work engagement: a dynamic view of engagement

The review highlighted a relatively recent distinction and passage from what has been defined as trait engagement to state work engagement (Macey and Schneider, 2008; Sonnentag et al., 2010). As depicted in Figure 5, 25 of the papers analysed have studied engagement with a dynamic perspective, especially investigating how certain antecedents can affect engagement day-by-day.

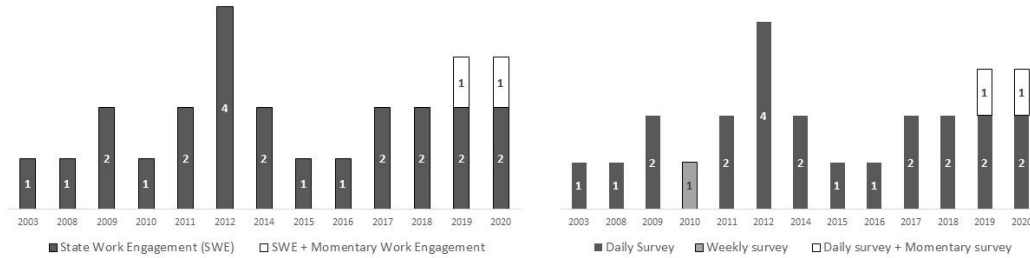


Figure 5. Empirical studies which have analyzed EE in a dynamic way.

Even in this case, as depicted in Figure 6, variables regarding social interactions are the most investigated (9 papers analysed engagement in relation with its antecedents), followed by variables concerning recovery and respite activities (6 papers).

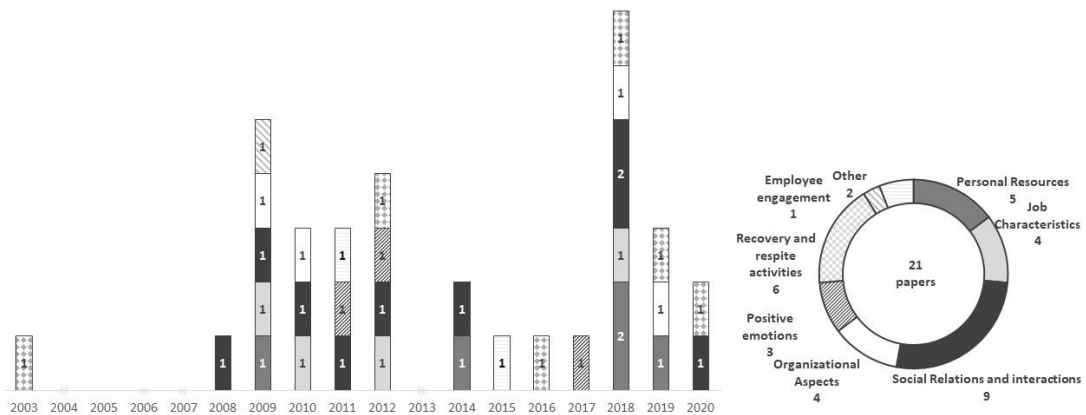


Figure 6. Relevant antecedents studied in relation to State Work Engagement.

In relation to the outcomes regarding state work engagement, studies have focused their attention analysing the relationship between EE and performance in-role and extra-role (respectively 3 and 2 papers) (figure 7).

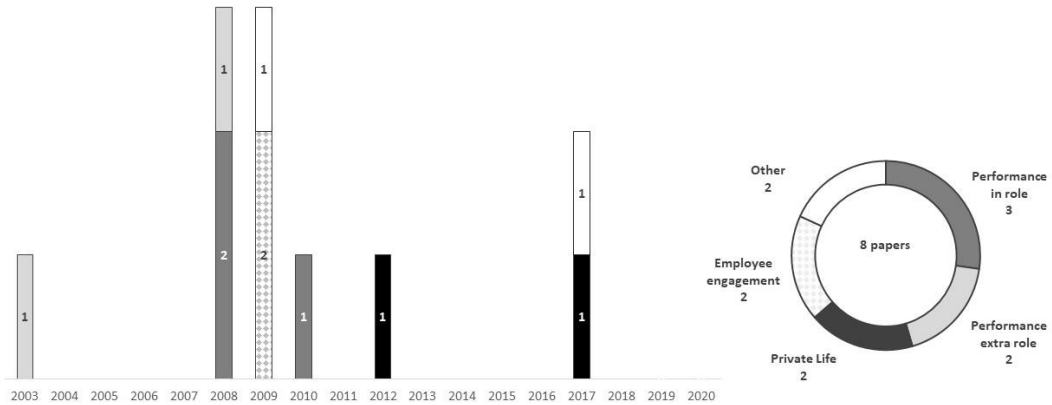


Figure 7. Relevant Outcomes studied in relation to State Work Engagement.

The trait engagement refers mainly to personal traits of individual and it concerns a more static conceptualization of engagement that change between persons. On the other hand, the state engagement (or daily work engagement) represents a more dynamic overview of engagement, aimed at investigating the personal daily fluctuations inside a human being (Sonnentag et al., 2010; Bakker and Oerlemans, 2019). In other words, if the first conceptualization is focused on inter-individual differences, the state work engagement (SWE) is focused on intra-individual differences in work engagement. This shift from a between-person to within-person approach represents a crucial change in studying engagement. This last one is no more considered only as an enduring state but also as a transactional state that is vulnerable to a lot of factors in the short term (Breevaart et al. 2014; Sonnentag et al., 2010).

Starting from the definition of EE offered by Schaufeli et al. (2002), SWE has been defined as a transient, positive, fulfilling, and work-related state of mind that fluctuates within individuals over a short period of time (Sonnentag et al., 2010), characterized by vigor, dedication, and absorption (Breevaart et al., 2012; Schaufeli and Bakker, 2004). As previously mentioned, the papers that have studied the state (or daily) work engagement always adopted the short version of UWES (Bakker and Oerlemans, 2019; Breevaart and Bakker, 2018). Breevaart et al. (2012) have tested and confirmed the effectiveness and efficiency of UWES in measuring state work engagement.

Recently, two papers have introduced the concept of momentary work engagement. Zeijen et al. (2020) have studied the daily relationship between social support and EE, measuring the last one two times over the workday, while Bakker and Oerlemans (2019) have investigated the possible mechanisms involved in the link between daily job crafting and daily EE and suggested a dynamic conception represented by momentary EE (Bakker and Oerlemans, 2019).

The principal assumption of momentary EE is to measure it in different moments during the workday, defining a point beginning and a point of end of specific activities (Bakker and Oerlemans, 2019). Already Kahn (1990) realized that employees may show different levels of engagement from moment to moment, and his "... specific concern was the moments in which people bring themselves into or remove themselves from particular task behaviours... people are constantly bringing in and leaving out various depths of their selves during the course of their workdays. They do so to respond to the momentary ebbs and flows of those days". From this viewpoint, it is possible thinking to state EE as the sum of several momentary engagement that compose the whole day.

4. Discussion and further research

This study emphasises especially two dimensions: the former concerns the relevance and the positive impact of external variables, in particular those related to social relations, on employee engagement; the latter regards the shift from a static to a more dynamic approach to engagement. These two aspects open the door to new issues and perspectives even considering the current situation due to Covid19 which has changed the way in which we work and interact with each other. Nowadays we have witnessed to a shift from a physical to virtual space of the workplace, leading us to rethink the way we work. At the same time, this changing led to the need to rethink how engage employee and how we can measure it

4.1. The importance of external variables in determining employee's engagement

This review has highlighted the importance of external variables in determining EE. Several studies have demonstrated on one hand how social relations, as the relationship between colleagues or certain approaches of leadership can predict engagement. On the other hand, studies have shown how organizational variables can influence the engagement of employees.

Previous literature reviews (e.g., Knight et al., 2017; Bakker 2011) and several papers have underlined the importance of internal variables, such as personal resources, in relation to EE, emphasizing the importance of psychological nature of human beings in determining EE. With this literature review we want to highlight the strong impact on engagement of external variables represented by social interaction and the work organizational context.

Although internal variables as personal resources are fundamental in determining whether employees are engaged, this review has demonstrated that contextual variables, such as organizational and especially relational variables, are the antecedents most investigated (analyzed by 75% of papers). Specifically, what we have included in social relations variables (analyzed by 43% of empirical researches) highlights how EE is a positive work-related state of mind built especially through the act of interaction with other closed individuals both within work environment, such as colleagues and supervisor and outside the workplace such as the own partner.

The relationship between employee and the supervisor is one of the most investigated (McGrath et al. 2017; Xanthopoulou et al. 2008). Studies have shown that supervisor support and certain approaches of leadership, such as transformational leadership, affect positively the engagement of his collaborators (Schmitt et al., 2016; Brevarta et al, 2014). The supervisor represents a key role in the representation of an organization, thus a good relationship between him and his collaborators could involve even in a good perception of the whole company (Saks, 2006). These results highlight the relevant role played by social relation variables in predicting EE, leading us to consider this phenomenon not only as a work-related state of mind but even as a social construction.

Results have shown that also organizational variables (the 32% of the papers analyzed), such as the perception of HR policies, distributive justice and opportunities of personal development affect positively on EE, reinforcing the idea that contextual factors have a strong and deep impact in maintaining high levels of it. These results show how the organizations play an important role in determining the degree of the engagement of employees through policies and actions addressed to support them in their journeys within the organization.

Additionally, social relations can also lead employees to experience positive emotions that researchers have demonstrated having a positive impact on EE. This

consideration leads us to reconsider positive emotions as a result of the impact of contextual variables on the interaction between two or more actors.

Nowadays the way we work is changed because of Covid19 and the workspace is shifted from a physical to a virtual space. Organizations had to adapt to this change and redesign their organizational models in relation to remote working. Starting from this framework we suggest that it could be interesting and fundamental to address future research which investigate how remote working change the way to be engaged, for example investigating how digital technologies influence the relationship between colleagues and supervisor and how they impact on engagement of employees. These kinds of relations are supported and mediated by digital technologies such as social platforms (e.g. Microsoft Teams, Skype, Zoom) which differ for many aspects such as the richness and the synchronicity of communication.

Regarding organizational variables it could be interesting to study how organizational policies could be able to influence positively EE, investigating for instance how flexible work arrangements within a mandatory remote working context can influence the degree of engagement. At the same time, it could be interesting to analyze how work organizations will be able to foster engagement seeking to answer to the problems that may verify within a remote working context such as hyper-connection, isolation and procrastination.

4.2. towards a dynamic conceptualization of employee's engagement

The third contribution of this literature review is the highlight of the dynamic nature of EE. Academics as well as practitioners used to consider and measure the degree of engagement in a static way, but the results of our review have shown that, recently an increasing amount of studies are studying EE with a dynamic approach, highlighting a shift from a between-person to a within-person approach. Engagement can fluctuate within individuals over a short period of time (Sonnentag, Dormann, and Demerouti, 2010).

Even in this case, the literature review has highlighted the importance of social relations variables in predicting engagement. In fact, if we take in considerations antecedents such as social relations, positive emotions and recovery and respite activities, we can observe that all these variables express themselves in a specific moment during the day. Thus, time becomes a crucial aspect in determining the degree of engagement in a specific moment.

Compared to personal resources, which are intrinsic aspects of human beings and need time to gain and maintain, social relation variables, such as the interactions with colleagues and supervisor and what this interaction cause in terms of emotions, energy, trust and will, are depleted in the immediate, modifying the degree of engagement of an individual.

In this scenario takes shape the concept of state work engagement, measuring daily, or the more recent momentary work engagement, measuring during the action of specific activities. Results have shown that nowadays, state and momentary work engagement are measured through daily survey and the adoption of UWES.

Starting from this framework, it could be interesting to address future research towards the conceptualization of momentary work engagement with the aim to better understand which kind of factors can predict engagement in a short period of time. This aspect, combined with the current situation due to Covid19 and the transition of work and social relations on virtual spaces as emails and social platforms, could open the way to new ways to measure and analyze engagement using new approaches offered by other disciplines like machine learning, for instance through content and sentiment analysis.

This new approach could offer even the advantage to find algorithm able to measure and predict engagement in real time, overpassing the traditional use of the survey and providing an instrument useful for all the organizations that want monitor and foster employee engagement in real time.

Finally, following the growing interest towards the daily fluctuations of EE, which required the necessity to detect the degree of EE constantly, and given the current situation in which the workspace is shifted from a physic to a virtual space, we suggest that this topic could be more investigated even by disciplines related data science, especially with the aim to investigate new frontiers to detect EE more dynamically (real time) with all the remarkable information available nowadays.

5. Limitations

There are a number of potentially limiting factors that should be considered. First, we have restricted our research only to documents written in English. Second, given the remarkable volume of documents found initially, we have selected only papers published in top journals (ranked as 4 and 4* in the ABS Academic Journal Guide), excluding probably other potential interesting studies. Third we decided to use only Scopus without to consult other sources. Fourth, although we have tried to show the relevant conceptual and theoretical evolution, we could forget other conceptualizations and important theoretical framework. Fifth, investigating only academic material, we have excluded the managerial documents, with the only exception for the Gallup Q12 measure scale and thus losing potential useful information. Sixth, having used many criteria for selecting papers, we surely have not included all the antecedents and outcomes analyzed in relation to engagement. Seventh, we have considered only the positive aspects of engagement, without investigating potential negative tendencies or relations with negative aspect. Finally, the categories identified for gathering antecedents are subject to our interpretation and thus they could be questionable.

6. Conclusions

In this review we have stressed the principal and relevant drivers of engagement. In particular, we have underlined how external variables, specifically related to social relations and interactions and organizational variables are able to predict and positively affect EE. We have highlighted the growing interest towards a state (or daily) and momentary work engagement and thus a shift from a static to a more dynamic way to measure and consider engagement. Finally, giving the current situation due to Covid19 and the implementation of new modalities of work from remote, we have suggested that it could be interesting investigate how change the way to be engaged. Specifically, it could be useful to analyse how digital technologies, used to implement forms of remote working, impact on the relationship between colleagues and supervisor, even exploring new approaches such as content and sentiment analysis and opening the possibility to measure and even predict engagement in real time. This aspect could be even useful for all companies that want to monitor and foster engagement in real time. At the same time, it could be interesting address future research which investigate the impact of organizational variables within remote working context can influence engagement and answer to the different problems related to the mandatory remote working context that we lived and that we are living because of Covid19.

References

Alfes, K., Truss, C., Soane, E. C., Rees, C. and Gatenby, M. (2013). The relationship between line manager behavior, perceived HRM practices, and individual

- performance: Examining the mediating role of engagement. *Human Resource Management*, 52(6), pp. 839–859.
- Bandura, A. and Wood, R. (1989). Social cognitive Theory of Organizational Management. *Academy of Management Review*, 14(3), pp. 361–384.
- Bakker, A. B. (2011). An evidence-based model of work engagement. *Current Directions in Psychological Science*, 20(4), pp. 265–269.
- Bakker, A. B., Demerouti, E., and Schaufeli, W. B. (2005). The crossover of burnout and work engagement among working couples. *Human Relations*, 58(5), pp. 661–689.
- Bakker, A. B., Demerouti, E. and Ten Brummelhuis, L. L. (2012). Work engagement, performance, and active learning: The role of conscientiousness. *Journal of Vocational Behavior*, 80(2), pp. 555–564.
- Bakker, A. B. and Oerlemans, W. G. M. (2019). Daily job crafting and momentary work engagement: A self-determination and self-regulation perspective. *Journal of Vocational Behavior*, 112(January 2018), pp. 417–430.
- Bakker, A. B., Tims, M. and Derks, D. (2012). Proactive personality and job performance: The role of job crafting and work engagement. *Human Relations*, 65(10), pp. 1359–1378.
- Bakker, A. B. and Xanthopoulou, D. (2009). The Crossover of Daily Work Engagement: Test of an Actor-Partner Interdependence Model. *Journal of Applied Psychology*, 94(6), pp. 1562–1571.
- Bakker, A. B. and Leiter, M. P. (Eds.). (2010). *Work engagement: A handbook of essential theory and research*. New York: Psychology Press.
- Biggs, A., Brough, P. and Barbour, J. P. (2014). Strategic alignment with organizational priorities and work engagement: A multi-wave analysis. *Journal of Organizational Behavior*, 35(3), pp. 301–317.
- Bledow, R., Schmitt, A., Frese, M. and Kühnel, J. (2011). The affective shift model of work engagement. *Journal of Applied Psychology*, 96(6), pp. 1246–1257.
- Brauchli, R., Schaufeli, W. B., Jenny, G. J., Füllemann, D. and Bauer, G. F. (2013). Disentangling stability and change in job resources, job demands, and employee well-being - A three-wave study on the job-demands resources model. *Journal of Vocational Behavior*, 83(2), pp. 117–129.
- Breevaart, K. and Bakker, A. B. (2018). Daily job demands and employee work engagement: The role of daily transformational leadership behavior. *Journal of Occupational Health Psychology*, 23(3), pp. 338–349.
- Breevaart, K., Bakker, A. B. and Demerouti, E. (2014). Daily self-management and employee work engagement. *Journal of Vocational Behavior*, 84(1), pp. 31–38.
- Breevaart, K., Bakker, A. B., Demerouti, E. and Hetland, J. (2012). The Measurement of state work engagement: A multilevel factor analytic study. *European Journal of Psychological Assessment*, 28(4), pp. 305–312.
- Breevaart, K., Bakker, A., Hetland, J., Demerouti, E., Olsen, O. K. and Espevik, R. (2014). Daily transactional and transformational leadership and daily employee engagement. *Journal of Occupational and Organizational Psychology*, 87(1), pp. 138–157.
- Byrne, Z. S., Peters, J. M. and Weston, J. W. (2016). The struggle with employee engagement: Measures and construct clarification using five samples. *Journal of Applied Psychology*, 101(9), pp. 1201–1227.
- Chong, S., Kim, Y. J., Lee, H. W., Johnson, R. E. and Lin, S.-H. (2020). Mind your own break! The interactive effect of workday respite activities and mindfulness on

- employee outcomes via affective linkages. *Organizational Behavior and Human Decision Processes*, 159, pp. 64–77.
- Christian, M. S., Garza, A. S. and Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, 64(1), pp. 89–136.
- Crawford, E. R., LePine, J. A. and Rich, B. L. (2010). Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analytic test. *Journal of Applied Psychology*, 95(5), pp. 834–848.
- Cropanzano, R. and Mitchell, M.S. (2005), Social exchange theory: an interdisciplinary review, *Journal of Management*, Vol. 31, pp. 874–900.
- Cropanzano, R., Rupp, D. E. and Byrne, Z. S. (2003). The relationship of emotional exhaustion to work attitudes, job performance, and organizational citizenship behaviors. *Journal of Applied Psychology*, 88(1), pp. 160–169.
- Demerouti, E., Bakker, A. B., Nachreiner, F. and Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), pp. 499–512.
- Dlouhy, K, Casper, A. (2020). Downsizing and surviving employees' engagement and strain: The role of job resources and job demands. *Human Resource Management*, pp. 1–20.
- Eldor, L. and Harpaz, I. (2016). A process model of employee engagement: The learning climate and its relationship with extra-role performance behaviors, *Journal of Organizational Behavior*, Vol. 37, pp. 213–235.
- Fredrickson B.L. (1998). What good are positive emotions? *Review of General Psychology*, 2(3), pp. 300–319.
- Fredrickson B.L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist* 56(3): 218–226.
- Gutermann, D., Lehmann-Willenbrock, N., Boer, D., Born, M. and Voelpel, S.C. (2017), How Leaders Affect Followers' Work Engagement and Performance: Integrating Leader–Member Exchange and Crossover Theory. *British Journal of Management*, 28, pp. 299-314.
- Hakanen, J. J., Perhoniemi, R. and Toppinen-Tanner, S. (2008). Positive gain spirals at work: From job resources to work engagement, personal initiative and work-unit innovativeness. *Journal of Vocational Behavior*, 73(1), pp. 78–91.
- Halbesleben, J. R. B., Harvey, J. and Bolino, M. C. (2009). Too Engaged? A Conservation of Resources View of the Relationship Between Work Engagement and Work. *Journal of Applied Psychology*, 94(6), pp. 1452-65
- Harter, J. K., Schmidt, F. L. and Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87(2), pp. 268–279.
- Haynie, J. J., Mossholder, K. W. and Harris, S. G. (2016) Justice and job engagement: The role of senior management trust. *Journal of Organizational Behavior*, 37, pp. 889–910.
- Hobfoll, S.E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44, pp. 513–524.
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology: An international Review*, 50, pp. 337–369.
- Kahn, W. A. (1990). Psychological Conditions of Personal Engagement and Disengagement at Work. *The Academy of Management Journal*, 33 (4)

- Kühnel, J., Sonnentag, S. and Bledow, R. (2012). Resources and time pressure as day-level antecedents of work engagement. *Journal of Occupational and Organizational Psychology*, 85(1), pp. 181–198.
- Kühnel, J., Sonnentag, S. and Westman, M. (2009). Does work engagement increase after a short respite? The role of job involvement as a double-edged sword. *Journal of Occupational and Organizational Psychology*, 82(3), pp. 575–594.
- Kumar, V., and Pansari, A. (2015), Measuring the benefits of employee engagement, *MIT Sloan Management Review*, Vol. 56, No. 4, pp. 67–72.
- Macey, W.H. and Schneider, B. (2008) The Meaning of Employee Engagement. *Industrial and Organizational Psychology*, 1, 3-30.
- Maslach, C. (1982). Understanding burnout: Definitional issues in analyzing a complex phenomenon. *Job stress and burnout. ... a Complex Phenomenon: Job Stress and Burnout*, June, pp. 29–40.
- Maslach, C., & Leiter, M. P. (1997). *The truth about burnout: How organizations cause personal stress and what to do about it*. San Francisco, CA: Jossey-Bass.
- Maslach, C. and Leiter, M. P. (2008). Early Predictors of Job Burnout and Engagement. *Journal of Applied Psychology*, 93(3), pp. 498–512.
- Maslach, C., Schaufeli, W. B. and Leiter, M. P. (2001). Job Burnout. *Annual Review of Psychology*, 52(1), pp. 397–422.
- McGrath, E., Cooper-Thomas, H. D., Garrosa, E., Sanz-Vergel, A. I. and Cheung, G. W. (2017). Rested, friendly, and engaged: The role of daily positive collegial interactions at work. *Journal of Organizational Behavior*, 38(8), pp. 1213–1226.
- Manyijka, J., Chui, M., Bughin, J., George, K., Willmott, P. and Dewhurst, M. (2017). *A Future That Woks: Automation, Emoployment, And Productivity*. McKinsey Global Institution, January, pp. 1–28.
- Muthén, L. K. and Muthén, B. O. 1998-2015. *Mplus user's guide (7th ed)*. Los Angeles: Muthén and Muthén.
- Ouweneel, E., Le Blanc, P. M., Schaufeli, W. B. and van Wijhe, C. I. (2012). Good morning, good day: A diary study on positive emotions, hope, and work engagement. *Human Relations*, 65(9), pp. 1129–1154.
- Ozyilmaz, A. (2020). Hope and human capital enhance job engagement to improve workplace outcomes. *Journal of Occupational and Organizational Psychology*, 93(1), pp. 187–214.
- Pierce, J. L., Gardner D. G., Cummings L. L. and Dunham R. B. (1989). Organization-based self-esteem: Construct definition, measurement and validation. *Academy of Management journal*, 32 (3), pp. 622-648.
- Richter, P., Hacker W. (1998). *Belastung und Beanspruchung: Stress, Ermüdung und Burnout im Arbeitsleben [german]*. Heidelberg: Asanger Verlag
- Ryan, R. M. and Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68.
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), pp. 600–619.
- Schaufeli, W., Salanova, M., González-romá, V., and Bakker, A. (2002). The Measurement of Engagement and Burnout: A Two Sample Confirmatory Factor Analytic Approach. *Journal of Happiness Studies*, 3(1), pp. 71–92.
- Schaufeli, W. B. and Bakker, A. B. (2004). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior*, 30, pp. 893–917.

- Schaufeli, W. B., Bakker A., Van Rhenen W. (2009). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25(3), pp. 293–315.
- Schaufeli, Wilmar & Shimazu, Akihito & Hakanen, Jari & Salanova, Marisa & De Witte, Hans. (2017). An Ultra-Short Measure for Work Engagement: The UWES-3 Validation Across Five Countries. *European Journal of Psychological Assessment*, 35, pp. 1-15.
- Scheier, M. F., Carver, C. S. and Bridges, M. W. (1994). Distinguishing Optimism From Neuroticism (and Trait Anxiety, Self-Mastery, and Self-Esteem): A Reevaluation of the Life Orientation Test. *Journal of Personality and Social Psychology*, 67(6), pp. 1063–1078.
- Schmitt, A., Den Hartog, D.N. and Belschak, F.D. (2016), Transformational leadership and proactive work behaviour: A moderated mediation model including work engagement and job strain. *Journal of Occupational and Organizational Psychology*, 89, pp. 588-610.
- Shuck, B. and Wollard, K. (2010). Employee Engagement and HRD: A Seminal Review of the Foundations. *Human Resource Development Review*, 9, pp. 89-110
- Shuck, B., Adelson, J.L. and Reio, T.G. (2017). The employee engagement scale: initial evidence for construct validity and implications for theory and practice. *Human resources Management*, 56 (6), pp. 953-977
- Siu, O. ling, Lu, J. fang, Brough, P., Lu, C. qin, Bakker, A. B., Kalliath, T., O’Driscoll, M., Phillips, D. R., Chen, W. qing, Lo, D., Sit, C., and Shi, K. (2010). Role resources and work-family enrichment: The role of work engagement. *Journal of Vocational Behavior*, 77(3), pp. 470–480.
- Sonnentag, S., Binnewies, C. and Mojza, E. J. (2010). Staying well and engaged when demands are high: The role of psychological detachment. *Journal of Applied Psychology*, 95(5), pp. 965–976.
- Sonnentag, S., Dormann, C. and Demerouti, E. (2010). Not all days are equal: The concept of SWE. In M. P. Leiter, and A. B. Bakker (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 25–38). New York, NY: Psychology Press.
- Sonnentag, S., Eck, K., Fritz, C. and Kühnel, J. (2019). Morning Reattachment to Work and Work Engagement During the Day: A Look at Day-Level Mediators. *Journal of Management*, XX(X), pp. 1–28.
- Steffens, N. K., Yang, J., Jetten, J., Haslam, S. A. and Lipponen, J. (2018). The unfolding impact of leader identity entrepreneurship on burnout, work engagement, and turnover intentions. *Journal of Occupational Health Psychology*, 23(3), pp. 373–387
- Tranfield, D., Denyer, D. and Smart, P. (2003), Towards a Methodology for Developing Evidence-Informed Management Knowledge by Means of Systematic Review, *British Journal of Management*, Vol. 14, No. 3, pp. 207–222.
- Tims, M., Bakker, A. B. and Derks, D. (2013). The impact of job crafting on job demands, job resources, and well-being. *Journal of Occupational Health Psychology*, 18(2), pp. 230–240.
- Tims, M., Bakker, A. B. and Xanthopoulou, D. (2011). Do transformational leaders enhance their followers’ daily work engagement? *Leadership Quarterly*, 22(1), pp. 121–131.
- Urry, J , 2007 *Mobilities* (Polity Press, Cambridge)

- Wayne, S. J., Shore, L. M. and Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal*, 40(1), pp. 82–111.
- Weigl, M., Hornung, S., Parker, S. K., Petru, R., Glaser, J. and Angerer, P. (2010). Work engagement accumulation of task, social, personal resources: A three-wave structural equation model. *Journal of Vocational Behavior*, 77(1), pp. 140–153.
- WEF. (2019). WEF Annual Report 2018-2019. *AIMS Mathematics*, 4(1), pp. 166–169.
- Weiss H.M. and Cropanzano R. (1996). Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. In: Staw BM and Cummings LL (eds) *Research in Organizational Behavior*. Greenwich, CT: JAI Press, pp. 1–74.
- Xanthopoulou, D., Baker, A. B., Heuven, E., Demerouti, E. and Schaufeli, W. B. (2008). Working in the Sky: A Diary Study on Work Engagement Among Flight Attendants. *Journal of Occupational Health Psychology*, 13(4), pp. 345–356.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E. and Schaufeli, W. B. (2009). Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational Behavior*, 74(3), pp. 235–244.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E. and 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(1), pp. 183–200.
- Yeh, C. M. (2013). Tourism involvement, work engagement and job satisfaction among frontline hotel employees. *Annals of Tourism Research*, 42, pp. 214–239.
- Zeijen, M.E., Petrou, P., Bakker, A.B. and van Gelderen, B.R. (2020), Dyadic support exchange and work engagement: An episodic test and expansion of self-determination theory. *Journal of Occupational and Organizational Psychology*, 93, pp. 687-711.
- Zupic, I. and Čater, T. (2015), *Bibliometric Methods in Management and Organization*, *Organizational Research Methods*, 18 (3), pp. 429–472.