



Managerial competencies, innovation and engagement in SMEs: The mediating role of organisational learning



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ABSTRACT

According to job demands-resources theory, resources promote positive attitudes, which results in several positive behaviors at work. However, there is little research that examines the effect of managerial competencies on positive attitudes at work. Our research proposes a scale of 7 managerial competencies that evidence to be connected with a particularly relevant attitude at work, namely, engagement. We find that the proposed managerial competencies scale overcomes the required psychometric properties, on the basis of a sample of 204 managers of Spanish SMEs. Following job demands-resources theory, our study confirms a direct and positive effect of the 7 managerial competencies on engagement. The implications of the study are that managerial competencies should be considered by managers to promote engagement at work.

1. Introduction

To develop sustainable and competitive advantages firms have to manage knowledge (Hine, Parker, & Ireland, 2010). Our research aims to measure and conceptualise the knowledge managerial competencies, which are defined as characteristics that lead to better performance (Boyatzis, 1982). Bailey et al. (2015) claim the need of examining areas of particular interest related to engagement antecedents, such as the effect of strategies to promote engagement levels. However, very little empirical research analyzes the relationship between managerial competencies and positive attitudes. Engagement antecedents have traditionally been focused on psychological states, perceived leadership or individual perceptions of organisational characteristics (Bailey et al., 2015). Our first objective is to close this gap by suggesting the managerial competencies that might enhance manager's engagement at work. Through job demands-resources theory (JD-R), which states that job resources (physical, psychological, social, or organisational characteristics of a job) stimulate positive attitudes such as engagement (Schaufeli & Bakker, 2004), our second objective is to determine if the knowledge managerial competencies affect managers' engagement. We know that resources enhance employees energy and increase engagement, fostering performance (Schaufeli, Bakker, & Salanova, 2006), while job demands might lead to fatigue and tiredness as a result of expending additional effort. Following JD-R theory, when employees have enough resources, they are more engaged with their work. We consider the knowledge managerial competencies as a job resource that

may explain engagement levels. Our research is framed in Spanish SME's managers. Higher job levels require higher capabilities and abilities. In that context, the knowledge managerial competencies might further increase engagement under those conditions that promote learning, namely organisational learning capability (OLC). Although previous research examines the mediating role of OLC in the relationship between transformational leadership and positive attitudes, such as happiness at work (HAW) (Salas-Vallina, López-Cabrales, Alegre, & Fernández, 2017), one key gap that requires to be filled in the management literature is the role of OLC between managerial competencies and engagement. Our second objective is to examine the mediating role of OLC in the relationship between managerial competencies and engagement. If we can better explain engagement antecedents, we will be able to achieve a better performance (Schaufeli, Salanova, Gonzalez-Romá, & Bakker, 2002). Our research also provides a new measurement scale, namely, the managerial competencies scale, which contributes to further research on managerial competencies.

2. Theoretical background and hypotheses

Our research presents a framework for the influence of the managerial competencies on managers' engagement, considering the mediating role of OLC, based on the dynamic capabilities view of the firm (Helfat & Peteraf, 2003). Capabilities are dispositions of routines and resources that facilitate a firm achieving its goals (Nelson & Winter, 1982). Dynamic capabilities are the organisational and strategic

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routines by which managers modify their firms' resource ground by obtaining and recombining resources to produce new value-creating strategies (Eisenhardt & Martin, 2000). Dynamic capabilities allow the organization to reconfigure its capabilities to adjust them to its context. We build both on the basis of the dynamic capabilities view and the job demands-resources (JD-R) theory. Job demands-resources theory states that job resources (physical, psychological, social, or organisational characteristics of a job) stimulate positive attitudes such as engagement (Schaufeli & Bakker, 2004), while job demands promote burnout. Resources enhance employees' energy and increase engagement, fostering performance (Schaufeli et al., 2006). Job demands might lead to fatigue and tiredness as a result of expending additional effort.

2.1. Engagement

The scientific study of human strength and optimum functioning presents increasing attention in our century (Seligman & Csikszentmihalyi, 2000), in contrast with the negative perspective focused on disease, illness or disability. Luthans (2002) stated that these positive human strengths could be measured and managed for performance improvement. Later, he defined PsyCap as a core construct that predicts performance and positive attitudes (Luthans, 2002). PsyCap refers to confidence, optimism, hopes and resiliency (Luthans, 2002). Engagement is one of this positive states widely consolidated in literature that reflects the opposite to burnout.

It was Kahn (1990) who claimed that concepts such as job involvement were too alienated from day-to-day work, and defined personal engagement as 'the harnessing of organization member's selves to their work roles: in engagement, people employ and express themselves physically, cognitively, emotionally and mentally during role performances', stating that it is 'the behavior by which people give themselves to their work' (Kahn, 1990). He identifies two intrinsic components of engagement: first, the personal energies at work, and second, the work that allows one to express oneself. Maslach, Jackson, and Leiter (1997) argued that engagement is characterised by energy, involvement, and efficacy, corresponding to the three opposite dimensions of Maslach's burnout inventory, namely, exhaustion, cynicism, and ineffectiveness. Macey and Schneider (2008) understand positive engagement as 'feelings of persistence, vigor, energy, dedication, absorption, enthusiasm, alertness and pride'. The fact is that there is a lack of consistency and agreement in the concept on engagement (Zigarmi, Nimon, Houson, Witt, & Diehl, 2009).

Engaged employees make an extra effort to achieve organisational success (Meyer & Janney, 1989). Salanova, Agut, and Peiró (2005) showed a connection in the relationship between work engagement and customer loyalty. Following Schuck (2011) it is necessary to differentiate the concept of engagement from others such as job satisfaction, in order to elucidate and differentiate them. Despite the diversity of measures for employee engagement, in our research we take Schaufeli et al. (2002) scale with the aim of clarifying the concept. Schaufeli et al. (2002) define engagement as 'a positive, fulfilling work-related state of mind that is characterised by vigor, dedication and absorption'. Vigor is characterised by high levels of energy and the ability to cope with adverse situations at work, including perseverance in difficult times. Dedication involves experiencing enthusiasm, significance and challenge. Absorption implies experiencing difficulties in disconnecting from work because the employee is at ease, deeply devoted to his/her work, and does not notice the passing of time. We understand engagement in the same way as Schaufeli et al. (2002), related to Zigarmi et al. (2009) engagement concept of 'Employee Work Passion'. Engagement is a special feeling of energy and motivation related to thrill and passion at work. Therefore we circumscribe engagement in the field of feelings as a result of meaningfulness at work.

2.2. Knowledge managerial competencies and engagement

2.2.1. Measuring knowledge managerial competencies

Firms need to create and manage knowledge to develop sustainable and competitive advantages (Hine et al., 2010). Knowledge is a resource that generates added value to a business (Grant, 1966). For companies it becomes essential to examine the knowledge managerial competencies and its outcomes. Managerial competencies are defined as characteristics that lead to better performance (Boyatzis, 1982), which can be evaluated on the basis of behavioral measures. Constable and McCormick (1987) initially analyzed for specific industries the managerial competencies patterns. Cheng, Dainty, and Moore (2005) stated that besides competencies, it is necessary to consider the social interaction with other employees at work. It is due to the importance of managing perceptions and expectations of other.

Cardona and Lombardía (2005) developed a three-dimensional measure of managerial competencies, namely: (i) external competencies (capacity to perform strategies that improve firm results), (ii) interpersonal competencies (ability to relate effectively to peers at work) and (iii) personal competencies, which include the capacity to transmit trust and exemplarity to collaborators. Other authors focused on emotional and social intelligence (Goleman, Boyatzis, & McKee, 2013) or courage, justice and temperance (Wright & Goodstein, 2007). We based our concept of knowledge managerial competencies on Cardona and Lombardía (2005) for its simplicity and straightforward interpretation. For all the above, we propose a model that includes 7 knowledge managerial competencies, which can be classified in 3 groups: external, interpersonal and personal competencies. External competencies are related to actions that directly affect the organization's profitability. For example, Cheng et al. (2005) examined customer orientation, and Van der Laan and Erwee (2012) considered strategic vision. We propose three external competencies: Business vision, or the capacity to recognise and seize opportunities, dangers and external forces that impact on the competitiveness and effectiveness of the business; Customer orientation, or the capacity to respond promptly and effectively to customer needs and suggestions; and Negotiation, or the capacity to get reaches agreements that satisfy the interests of both parties.

Interpersonal competencies are those focusing on effective relationships with other employees in the organization. Cheng et al. (2005) studied teamwork and cooperation as interpersonal competencies. We propose Delegation, or the concern that the team members have the ability to take decision by their own, as competencies included in this group.

Personal competencies are related to self-development and individual capacities like Emotional intelligence (Goleman et al., 2013) or Open-mindedness (Tett, Guterman, & Bleier, 2000). We suggest the following competencies in this group: creativity, understood as the generation of innovative approaches and solutions to problems; Optimism, or the capacity of viewing situations and problems from its most favorable side; and Time management, or the capacity to prioritise and schedule activities.

2.2.2. The relationship between knowledge managerial competencies and engagement

Previous research has examined competencies observing behaviors (Woodruffe, 1993), habits (Cardona & Chinchilla, 1999), and patterns and circumstances (Ruth, 2006). Our study explores the effects of managerial competencies focused on attitudinal outcomes for the following reasons: (i) managerial competencies can be considered personal resources, and following the job-demands resources theory resources promote positive attitudes such as engagement, and (ii) engagement predicts a wide diversity of important organisational outcomes.

Bailey et al. (2015) claim the need of examining areas of particular interest related to engagement antecedents, such as the effect of

strategies to promote engagement levels. The fact is that past research of engagement antecedents is focused on psychological states, perceived leadership, individual perceptions of organisational characteristics and job resources (Bailey et al., 2015). Psychological states were mainly focused on self-efficacy, resilience and personal resources. These personal strengths and abilities were found to be positively connected with engagement (Del Libano, Llorens, Salanova, & Schaufeli, 2012). Xanthopoulou, Bakker, Demerouti, and Schaufeli (2009) and Ouweneel, Le Blanc, and Schaufeli (2012) found that personal resources are linked to engagement over time. Following JD-R theory, when employees have enough resources, they are more engaged with their work. The conservation of resources (COR) theory (Hobfoll, 1989), affirms that people aim to acquire, maintain and protect resources, including objects (material goods), personal characteristics (self-esteem, courage), conditions (status) and energies (time, money, knowledge). This theory explains that resources enable individuals to secure other resources in a gaining spiral. Then, considering the managerial competencies as a core resource that may lead to key positive attitudes such as engagement, we propose our first hypothesis:

Hypothesis 1. Knowledge managerial competencies have a direct and positive effect on engagement.

2.3. The mediating role of organisational learning capability

Traditionally, one of the most recognised limits of the capabilities perspective is the 'opaqueness' between capabilities and outcomes (Dosi, Faillo, Manara, Marengo, & Moschella, 2017), and our research aims to close this gap by examining the mediating role of OLC in the relationship between managerial competencies and engagement. Organisational learning can be defined as the process by which organizations learn, producing a change in organisational models that maintain or improve outcomes (Dibella, Nevis, & Gould, 1996). We propose that organisational learning will be directly influenced by the managerial competencies, and in turn organisational learning positively affects engagement. Chiva, Alegre, and Lapiedra (2007) identified five facilitating factors of organisational learning, namely: experimentation, risk acceptance, interaction with the environment, dialogue, and participation in decision-making. Experimentation is the level to which new ideas and suggestions are sensitively considered (Chiva et al., 2007). Risk taking is understood as the tolerance of uncertainty, and errors. Interaction with the external environment refers to the relationships with the external environment (factors that are beyond the organization's direct control of influence among others). Dialogue is the collective analysis of processes, assumptions and certainties. And participative decision-making is related to the degree of power employees have in the decision-making process.

On the basis of Simon (1991) and Weick and Roberts (1993) perspective, learning is constrained from cognitive abilities. Simon (1991), for example, has stated that 'all learning takes place inside human heads and an organization learns in one of two ways: by the learning of its members or by ingesting new members who have knowledge that the organization didn't previously have'. To understand how a learning context emerges, it is necessary to consider the role of cognition (Simon, 1991). It has been demonstrated that individual motivation and willingness to search for learning opportunities were crucial in confirming who effectively learnt. Our research focuses on managerial competencies, which is part of the intellectual capital of an organization. Research shows that intellectual capital is the valuable knowledge of a firm and improves organisational learning capability (Bontis, Keow, & Richardson, 2000). Organisational learning depends on how knowledge, information and ideas are used by organisational members (Kought & Zander, 1992). Coleman (1990) argues that employees with more relationships and networks might show better information acquisition. Also, Tsai (1990) states that employees with better communication skills and have more options to access different resources. We

affirm that it seems plausible that employees with more abilities, capabilities and external competencies, or in other words, employees with better external, interpersonal and personal competencies may facilitate a climate of learning, namely OLC.

It is nonetheless also likely that OLC affects positive attitudes. Hackman and Oldham's job characteristics theory (Hackman & Oldham, 1980) explains how certain job characteristics influence positive attitudes, such as job satisfaction. Goh, Elliot, and Quon (2012), in a meta-analysis, evidenced the strong relationship between organisational learning and different types of performance. In general, research shows that contexts that facilitate learning promote positive attitudes. For example, it has been proved that organisational learning affects job satisfaction (Rose, Kumar, & Pak, 2009) and organisational commitment (Rose et al., 2009; Wu and Cavusgil (2006). Bussing, Bissels, Fuchs, and Perrar (1999), observed a connection between job satisfaction and employee engagement. Goh et al. (2012) provided empirical evidence that organisational learning positively affects positive attitudes, such as job satisfaction. However, little research has examined the effects of the learning conditions of OLC on engagement. Chiva and Alegre (2008) empirically demonstrated the mediating role of OLC in the relationship between emotional intelligence and job satisfaction. Durham, Knight, and Locke (1997) revealed that organisational learning promotes organisational commitment and fosters involvement. In line with this, our model suggests that OLC has a positive effect on engagement. Considering all this, our second hypothesis is:

Hypothesis 2. OLC mediates the relationship between knowledge managerial competencies and engagement.

3. Methodology

3.1. Target population and sample

The dynamic capabilities approach refers to the organisational and strategic routines by which managers modify their organizations (Eisenhardt & Martin, 2000), and our model includes the managerial capabilities construct. All these reasons lead us to check our hypotheses among Spanish SMEs managers. We received a total of 204 valid questionnaires, which represents 47% of the study population ($n = 434$). The managerial sample was randomly selected, incorporating managers who are in charge of an average of 30 workers who assume the ultimate responsibility of the company. We included managers across a broad spread of age, seniority, specialisation, gender and background, all of them in the manufacturing sector. It is important to point out that engagement is a way to enhance employees' productivity. Managers are essential to generate the background where employees feel passionate about their work to drive better results. 'Managers are in a critical position to increase or decrease engagement because they touch key drivers such as accountability, work processes, compensation, recognition and career opportunities' (Baumruk, 2006).

Most of the studies related to engagement are quantitative, in order to connect them to other organisational concepts in a more objective and transposable manner. Our research will continue with this trend and quantitative methodology will be used.

The survey was carried out by means of an electronic questionnaire, sent by e-mail, explaining the importance of the survey and guaranteeing the anonymous treatment of information given. Electronic questionnaires involve cost reduction and an immediate availability of the survey.

Publishing the results of a survey encourages participants to take part in it (Malhotra, Kim, & Agarwal, 2004). Therefore, with the aim of obtaining the maximum number of participants, accepting to collaborate in the survey would receive a general report of the study.

3.2. Measurement of variables and methodology

To measure knowledge management competencies we used the [Lara et al. \(2012\)](#) and [Lara \(2015\)](#) scale. It is a 7-item Likert scale, ranging from 1 to 6 (e.g. ‘I recognize and seize opportunities, dangers and external forces that impact on the competitiveness and effectiveness of the business’).

To measure OLC we used the [Chiva et al. \(2007\)](#). This scale consists of five dimensions (experimentation, risk acceptance, interaction with the environment, dialogue, and participation in decision making) and a total of 14 items.

To measure engagement we used the UWES-9 measurement scale ([Schaufeli et al., 2002](#)), which comprises 9 items, in a Likert scale ranging from 1 to 6 (e. g. I feel happy when I am working intensely).

3.3. Analysis

The methodology chosen was structural equations models, because they are one of the most powerful tools in the social sciences to study causal relationships in non-experimental data when such relationships are of a linear nature ([Saris, Batista-Fogueat, & Coenders, 2007](#)). Structural equations techniques present two characteristics ([Hair, Black, Babin, Anderson, & Tatham, 2006](#)): the estimation of multiple and cross-dependence relationships, and their ability to represent concepts, which have not been observed in these relationships, while taking into account the measurement error in the estimation process. This technique is especially useful in studies that have a theoretical framework where a dependent variable can be converted into an independent variable in subsequent dependence relationships.

This methodology provides estimations on the strength of all relationships, established through hypotheses, between variables in a theoretical framework. It therefore offers information on the direct impact of one variable on another, as well as on their impact through other mediating variables. Besides this, this methodology allows to examine the psychometric properties of measurement scales, considering dimensionality, reliability and validity.

4. Results

The psychometric properties of the measurement scales were analyzed in congruence with accepted methods ([Gerbing & Anderson, 1988](#)), involving dimensionality, reliability, content validity, convergent validity and discriminant validity ([Table 1](#)). Dimensionality allows us to verify that the factorial structure is adequate in configuring KMC, engagement and OLC scales. Reliability refers to the level of quality of the measurement scale (considering random error). Validity assures that the scale measures what it is intended to measure.

All factor loadings are sufficiently high and significant. The correct fit of the second-order factor model was also verified. The p-value is above 0.05 for the KMC scale (see [Table 1](#)).

Their content validity can be confirmed. Following the theoretical review of previous section, all items of the KMC scale have been connected with previous managerial competencies research. The results also provide support for convergent and discriminant validity. Convergent validity exists when the measure used is highly correlated with other measures of the same concept ([Camisón, 1999](#)). Convergent

Table 1
Psychometric properties of KMC.

Mod.	Satorra-Bentler χ^2	d.f.	p-Value	BBNFI	CFI	RMSEA	NC (= χ^2 /d.f.)
KMC	41.35	12	< 0.001	0.991	0.993	0.048	3.445
OLC	124.18	63	0.038	0.982	0.990	0.037	1.971
ENG	57.48	22	0.011	0.967	0.971	0.051	2612

validity can be analyzed using the Bentler-Bonett normed-fit index (BBNFI, [Bentler & Bonett, 1980](#)), the value of the factor loadings, or the t values ([Bollen, 1989](#)). Convergent validity is verified if the BBNFI index exceeds 0.9, the factor loadings are above 0.4 ([Hair et al., 2006](#)), and the t values are > 1.96 ([Anderson & Gerbing, 1982](#)).

The results show, except for the control variable (age), that all these conditions are met, therefore confirming the convergent validity of the scales. To test for discriminant validity, following [Gatignon, Tushman, Smith, and Anderson \(2002\)](#), pairwise analysis using confirmatory factor analysis between all dimensions were performed, and then another model setting the correlation between these dimensions was estimated. Results confirm that the model fits better when the correlation between dimensions is different from unity, therefore demonstrating discriminant validity. Reliability of KMC dimensions can be seen as they are all above the 0.7 recommended value ([Nunnally, 1978](#)), with the R² of indicators. Highly reliable scales are strongly inter-correlated, indicating that they are measuring the same latent concept ([Hair et al., 2006](#)).

In [Fig. 2](#) we can see the estimation of the model, which reveals a positive and significant relationship between knowledge management competencies and engagement ($\alpha = 0.594$, $t = 6.770$, $p < 0.01$). Results show that the normed chi-square is under the recommended range of 4, the Bentler and Bonett Normed Fit Index (NFI), the Bentler and Bonett Not Normed Fit Index (NNFI) and the Comparative Fit Index (CFI) are close to 1. The Root Mean Square Error of Approximation (RMSEA) is under the recommended value of 0.008. It may therefore be concluded, except for the control variable (not significant), that the fit of the structural model is well acceptable. Knowledge managerial competencies are positively related to engagement (See [Fig. 1](#)).

[Fig. 3](#) shows the results when we introduce OLC as a mediating variable. In this case, the model presents a better fit and OLC positively mediates the relationship between KMC and engagement. The normed chi-square is 3.097, and the Bentler and Bonett Normed Fit Index (NFI), the Bentler and Bonett Not Normed Fit Index (NNFI) and the Comparative Fit Index (CFI) are close to 1. The Root Mean Square Error of Approximation (RMSEA) is under the recommended value of 0.008. Following [Tippins and Sohi \(2003\)](#) methodology, mediation is supported when:

- The total mediation model ($R^2 = 0.610$) explains a greater proportion of the variance of innovative behavior compared to the direct effect model ($R^2 = 0.524$).
- A direct and positive effect between knowledge managerial competencies and OLC was found ($\beta_2 = 0.590$, $t = 4.838$, $p < 0.01$).
- The significant relationship between altruistic leadership and innovative behavior disappeared in the mediation model. While the relationship between these two variables was direct and significant in the direct model ($\alpha = 0.594$, $t = 6.770$, $p < 0.01$), in the mediation model the direct effect was not significant ($\beta_1 = 0.064$, $t = 0.214$).
- Affiliative humor and innovative behavior also showed a direct relationship ($\beta_3 = 0.668$, $t = 5.933$) (See [Fig. 4](#)).

Hence, it is revealed that the adjusting of the structural model is appropriate and reveals a better fit if compared to the direct effect model, and therefore a total mediation is unmasked ([Tippins & Sohi, 2003](#)).

[Table 2](#) show that all correlation coefficients are significant and below 0.9 ([Luque, 1997](#)). [Table 2](#) also presents Cronbach's α coefficient above 0.8, exceeding the minimum accepted value of 0.7 ([Nunnally, 1978](#)).

5. Discussion

Engagement is a concept that has been in the focus of many investigations in recent years, although there is a surprising lack of



Fig. 1. Direct effect model.

research in the academic literature (Robinson, Perryman, & Hayday, 2004). Knowledge is an essential source of value for firms (Grant, 1966), which increasingly need to differentiate in a high competitive market. Besides this, human capital has the inimitable abilities and capacities that can make the difference between companies. It becomes essential to examine the knowledge managerial competencies and its effects on human capital. Our research aimed to empirically examine the effects of KMC on engagement. We also proposed a theoretical model in which the relationship between KMC and engagement was mediated by those conditions that facilitate learning, namely OLC. To our knowledge, no previous research has explored the nexus between these constructs, although some research has analyzed the relationship between competencies and positive attitudes, particularly between emotional intelligence and job satisfaction (Chiva & Alegre, 2008) or emotional intelligence and engagement (Boyatzis, Rochford, & Cavanagh, 2017).

This research offers three main contributions:

- a) First, we validate the psychometric properties of the Lara (2015) proposed measurement scale. Results show a very good fit of psychometric properties of the KMC scale, and therefore we can measure KMC in the context of SME's. While previous scales measured varied aspects of managerial competencies, our scale has the advantage of being short and rapidly to respond. The validated scale offers to researchers a tool for further development of KMC antecedents and consequences.
- b) Second, we provide a more complete picture of the managerial competencies-positive attitudes relationship, by revealing the relationship between KCM and engagement. Our research is based on the dynamic capabilities and JD-R theory. From the dynamic capabilities approach, we reveal their consequences on engagement. The JD-R model allows us to explain how personal resources impact on the working environment successfully (Hobfoll, 1989). The results of this study indicate that managers engagement depend on their competencies. In particular, the KMC predicted managers' engagement. Our research supports our second hypothesis, suggesting that engagement may be enhanced by means of KMC, in line with the previously mentioned theories (Schaufeli & Bakker, 2004). To

our knowledge there is no previous research that examines the relationship between managerial competencias and positive attitudes such as engagement, and therefore we provide a new theoretical proposed model that empirically verifies that KMC is a key resource that facilitates the engagement of employees towards the organization. This relationship opens a wide field of research given the crucial role of engagement for organizations (Schaufeli et al., 2002).

- c) Thirdly, our results suggest a mediating role of OLC in the relationship between KMC and engagement. Perhaps this is the largest contribution from this study. Previous literature suggests that OLC mediates the relationship between entrepreneurial orientation and performance (Alegre & Chiva, 2013). They focus on this specific managerial capability (entrepreneurial orientation) and do not examine its effects on positive attitudes. Competencies are activities which organize resources through ambiguous processes with unclear outcomes (Barney, 1991). We suggest that this important lack of knowledge might be due to not taking into account intermediate links such as OLC. Our findings could explain why some managers show a low engagement when they present high managerial competencies: the OLC nexus would be missing. Based on Simon (1991) and Weick and Roberts (1993), we demonstrate that cognitive abilities have a higher influence on engagement in contexts where learning capabilities are promoted. The role of OLC might be explained considering that skilled individuals tend to work in circumstances that promote those abilities of experimentation, risk taking, interaction with environment, dialogue and participative decision making (OLC), and in turn they are likely to have higher levels of engagement. Like previous studies, the results of this research suggest that OLC fosters positive attitudes (Chiva & Alegre, 2008; Salas-Vallina et al., 2017). Therefore, OLC might be interpreted as an inspiring working context, where capable and competent can develop their competencies and attain engagement. Our results support empirical evidence of the relevance of specific learning conditions for managing competencies. Hence, competencies require to be managed through established learning conditions, in order to achieve high levels of engagement among managers.

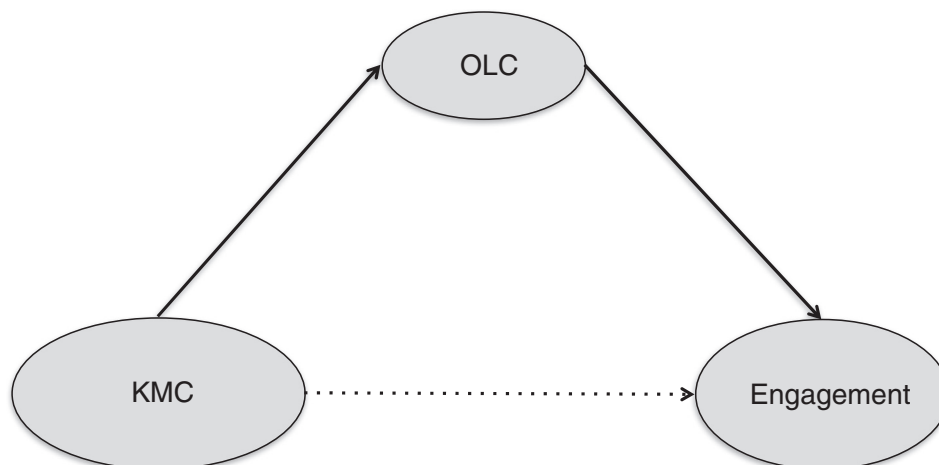


Fig. 2. Mediation model.

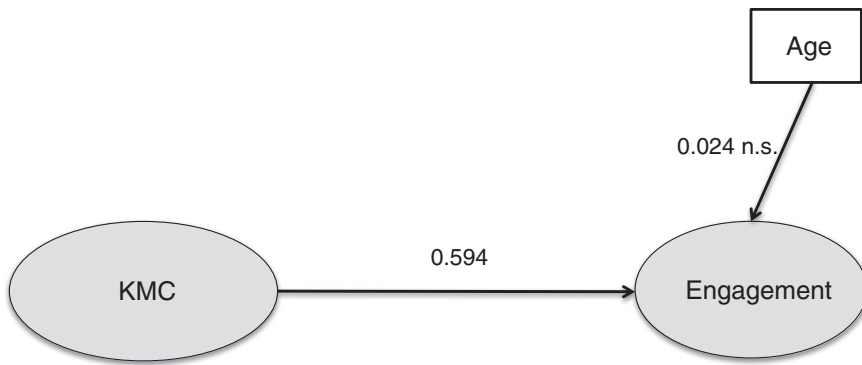


Fig. 3. Goodness-of-fit statistics of the direct effect model.

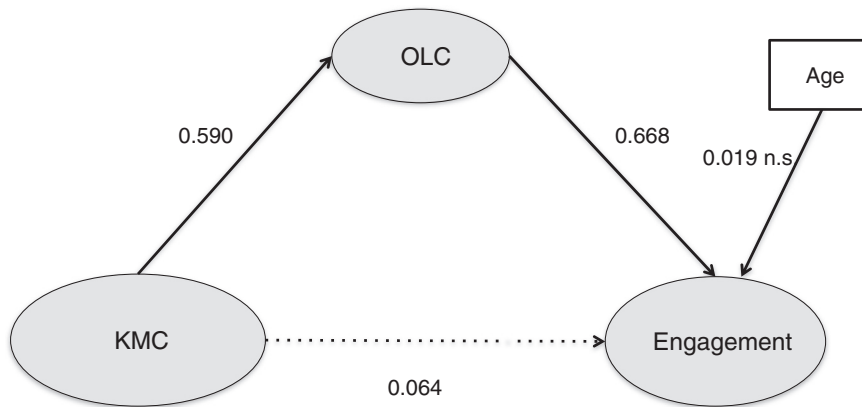


Fig. 4. Goodness-of-fit statistics of the total mediation model.

Table 2
Factor correlations.

	BUS	CUST	NEG	DEL	CRE	OPT	TMAN	EXP	RISK	INT	DIA	PART	VI	DE	ABS
BUS	(0.881)														
CUST	0.581**	(0.886)													
NEG	0.488**	0.505**	(0.851)												
DEL	0.534**	0.572**	0.422**	(0.740)											
CRE	0.470**	0.167*	0.449**	0.530**	(0.890)										
OPT	0.593**	0.377**	0.395**	0.491**	0.550	(0.782)									
TMAN	0.630**	0.492**	0.552**	0.650**	0.521**	0.321**	(0.823)								
EXP	0.380**	0.230**	0.311**	0.344**	0.211**	0.171*	0.249**	(0.779)							
RISK	0.239**	0.148*	0.298**	0.381**	0.317**	0.184**	0.212**	0.540**	(0.773)						
INT	0.330**	0.217**	0.416**	0.190**	0.187**	0.236**	0.190**	0.488**	0.530**	(0.884)					
DIA	0.290**	0.234**	0.398**	0.280**	0.109*	0.301**	0.224**	0.506**	0.541**	0.428**	(0.892)				
PART	0.440**	0.331**	0.299**	0.333**	0.216**	0.323**	0.188**	0.534**	0.205*	0.399**	0.404**	(0.763)			
VI	0.223**	0.190**	0.256**	0.210**	0.198**	0.300**	0.103**	0.202**	0.192**	0.161**	0.190**	0.155**	(0.811)		
DE	0.118**	0.211**	0.244**	0.291**	0.133**	0.199**	0.112**	0.180**	0.156**	0.111**	0.103**	0.162**	0.560**	(0.798)	
ABS	0.108**	0.178**	0.330**	0.203**	0.101*	0.294**	0.189**	0.117**	0.188**	0.106**	0.117**	0.101*	0.489**	0.433**	(0.868)

Note: All correlation coefficients are statistically significant.

* Significant correlation ($p < 0.05$).

** Significant correlation ($p < 0.01$) Cronbach's alpha coefficients are given in parenthesis.

Although much can be learned from utilizing the proposed theoretical model, engagement research will become part of policy-makers' training policies. Managers directly value their engagement with others, including their involvement in the process making public decisions, and engagement has far reaching consequences for any organization. The development of more comprehensive managerial training policies should be implemented. Of course, there is no guarantee that these training will come together in positive attitudes. In particular, it is necessary to foster those characteristics of OLC to enable positive attitudinal outcomes among managers. We call for more emphasis in creating the learning conditions under which managers increase their

engagement. Our holding is that management should be practiced in promoting learning conditions to develop key positive attitudes. We conclude that our proposed model integrates the managerial, learning and attitudinal literatures, and extends the research possibilities in all these areas.

6. Limitations and future research directions

The limitations of the paper open opportunities for future research. First, our research is based on self-reported information. Future research can consider asking the immediate superior or the subordinates.

Second, our study is limited to the SME's. It will be of significance to contrast of our model in different contexts, such as the public sector. In addition, we suggest considering the comparison between different cultures. Thirdly, engagement was used as an outcome variable, while

there are other forms of measuring positive attitudes, such as job satisfaction, subjective well-being, commitment or involvement, even using a combination of them.

Appendix A

Knowledge managerial competencies

(Lara, 2015)

1. Business vision
Recognise and seize opportunities, dangers and external forces that impact on the competitiveness and effectiveness of the business.
2. Customer orientation
Responds promptly and effectively to customer needs and suggestions.
3. Negotiation
Get reach agreements that satisfy the interests of both parties.
4. Delegation
Concerned that the team members have the ability to take decisions of the resources needed to achieve their goals.
5. Proactivity: Creativity
Generates innovative approaches and solutions to the problems it faces.
6. Proactivity: Optimism
View situations and problems from its most favorable side.
7. People management: Time management
Prioritise your goals, Schedule their activities properly and executing on Schedule.

Organisational learning capability

Chiva et al. (2007)

Organisational learning capability was measured by the scale developed by Chiva et al. (2007). This is a 14-item Likert scale with five dimensions, ranging from 1 “totally disagree” to 7 “totally agree”.

Dimension	Item
Experimentation	1. People here receive support and encouragement when presenting new ideas
	2. Initiative often receives a favorable response here so people feel encouraged to generate new ideas
Risk taking	3. People are encouraged to take risks in this organization
	4. People here often venture into unknown territory
Interaction with environment	5. It is part of the work of all staff to collect, bring back and report information about what is going on outside the company
	6. There are systems and procedures for receiving, collating and sharing information from outside the company
	7. People are encouraged to interact with the environment: competitors, customers, technological institutes, universities, suppliers etc.
Dialogue	8. Employees are encouraged to communicate
	9. There is a free and open communication within my group of work
	10. Managers facilitate communication
Participative decision making	11. Cross-functional teamwork is a common practice here
	12. Managers in this organization frequently involve employees in important decisions
	13. Policies are significantly influenced by the view of employees
	14. People feel involved in main company decisions

UWES-9: UTRECH work enthusiasm scale

Schaufeli et al. (2002)

The following 9 statements are about how you feel at work. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, cross the “0” (zero) in the space after the statement. If you have had this feeling indicate how often you felt it by crossing the number (from 1 to 6) that best describes how frequently you feel that way.

1. At my work, I feel bursting with energy. (VI1)
2. At my job, I feel strong and vigorous. (VI2)
3. I am enthusiastic about my job. (DE2)
4. My job inspires me. (DE3)
5. When I get up in the morning, I feel like going to work. (VI3)
6. I feel happy when I am working intensely. (AB3)

7. I am proud of the work that I do. (DE4)
8. I am immersed in my work. (AB4)
9. I get carried away when I am working. (AB5)

Note: VI = vigor scale; DE = dedication scale; AB = absorption scale.

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