



Leadership & Organization Development Journal

Effects of authentic leadership, affective commitment and job resourcefulness on employees' creativity and individual performance

Ana Suzete Dias Semedo Arnaldo Fernandes Matos Coelho Neuza Manuel Pereira Ribeiro

Article information:

To cite this document:

Ana Suzete Dias Semedo Arnaldo Fernandes Matos Coelho Neuza Manuel Pereira Ribeiro , (2016), "Effects of authentic leadership, affective commitment and job resourcefulness on employees' creativity and individual performance", Leadership & Organization Development Journal, Vol. 37 Iss 8 pp. 1038 - 1055

Permanent link to this document:

<http://dx.doi.org/10.1108/LODJ-02-2015-0029>

Downloaded on: 11 November 2016, At: 02:19 (PT)

References: this document contains references to 73 other documents.

To copy this document: permissions@emeraldinsight.com

The fulltext of this document has been downloaded 326 times since 2016*

Users who downloaded this article also downloaded:

(2016), "The relationship of leaders' humor and employees' work engagement mediated by positive emotions: Moderating effect of leaders' transformational leadership style", Leadership & Organization Development Journal, Vol. 37 Iss 8 pp. 1083-1099

(2016), "How does altruistic leader behavior foster radical innovation? The mediating effect of organizational learning capability", Leadership & Organization Development Journal, Vol. 37 Iss 8 pp. 1056-1082

Access to this document was granted through an Emerald subscription provided by emerald-srm:563821 []

For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit www.emeraldinsight.com/authors for more information.

About Emerald www.emeraldinsight.com

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

*Related content and download information correct at time of download.

Effects of authentic leadership, affective commitment and job resourcefulness on employees' creativity and individual performance

Ana Suzete Dias Semedo and Arnaldo Fernandes Matos Coelho
Faculty of Economics, University of Coimbra, Coimbra, Portugal, and
Neuza Manuel Pereira Ribeiro
*School of Technology and Management,
Polytechnic Institute of Leiria, Leiria, Portugal*

Abstract

Purpose – The purpose of this paper is to report the findings of a study examining the relationship between authentic leadership (AL), attitudes and employees' behaviours. More specifically, how AL influences affective commitment, job resourcefulness and creativity, which, in turn, influence individual performance.

Design/methodology/approach – Empirical research has analysed the data from a questionnaire administered to a sample of 543 employees belonging to various public and private organisations in Cape Verde. The model was tested using structural equation modelling.

Findings – The results reveal that AL influences employees' attitudes (affective commitment and job resourcefulness) and their creativity, affective commitment and job resourcefulness predict the employees' creativity, and job resourcefulness and creativity predict individual performance.

Practical implications – The results from this study can help managers to understand how to increase employees' creativity and performance through AL, affective commitment and job resourcefulness. Indirectly, the study also suggests that organisations should focus on selecting leaders with authentic features and implement appropriate training activities, coaching and development that aim to increase AL since this may well result in a positive impact on employees' attitudes and behaviours.

Originality/value – The originality of this study is that it focusses on the integration of the five concepts, AL, affective commitment, job resourcefulness, creativity and individual performance, in a single study, providing a model that depicts the chain of effects between AL, employees' attitudes, employees' creativity and individual performance.

Keywords Affective commitment, Creativity, Authentic leadership, Individual performance, Job resourcefulness

Paper type Research paper

1. Introduction

Leadership in organisations is perceived and valued by many stakeholders as a key element of success, a differentiating factor with strong impact on the achievement of goals through the transmission of motivation to its employees (Silva and Torres, 2010). However, due to the large number of moral and financial scandals associated with unscrupulous leaders of once-reputable companies, the need arises for new theories such as authentic leadership (AL), which are based on the moral character of the leader, concern for others and congruency between ethical values and actions (Shahid, 2010).



It is necessary to promote an appropriate organisational environment starting with the creation of a good relationship between leaders and employees, because one of the major challenges for organisations is to retain the best talents in a highly competitive business environment. In this sense, Nazari and Emami (2012) suggest a need to concentrate on AL as a root construct underlying all positive forms of leadership and its development.

Although the research in AL is recent, several studies stand out to seek a better understanding of this issue and its impact on organisations and employees' lives (e.g. Walumbwa *et al.*, 2008, 2010; Wong *et al.*, 2010; Gardner *et al.*, 2011; Rego *et al.*, 2013; Alok, 2014). Recently, the idea that AL is extremely important in organisations has been supported, as it helps its members to commit themselves to work, promoting a better social climate and better relationships between leaders and employees (George, 2003; Avolio and Gardner, 2005). Ilies *et al.* (2005) proposed that leaders with a relational authenticity will strive for open and truthful relationships with their followers, and such orientation will have a number of positive outcomes. This research follows the same line of investigation, as it shows how perceptions of AL have an impact on employees' attitudes (affective commitment and job resourcefulness), and how these attitudes impact their creativity and individual performance.

There are studies on AL, affective commitment, job resourcefulness, creativity and individual performance, but none of them integrate these five concepts in a single model. Likewise, there are many studies on leadership and its consequences, but research regarding AL and its impacts on employee attitudes and behaviours is scarce. Hence, this study aims to fill the research gaps by showing how AL can be a real asset changing employees' attitudes and behaviours, increasing creativity and individual performance. More specifically this study aims to understand how AL influences employees' affective commitment, job resourcefulness and creativity and then how this variable impacts individual performance. The originality of this study focusses on the integration of these five concepts in a single study, providing a model that depicts the chain of effects between AL, employees' attitudes, employees' creativity and individual performance. This study promotes a holistic approach on AL field investigating the impacts on employee's attitudes and behaviours.

The study's results seek to contribute to the argument that AL is not simply a theory for consideration by the academic community but also one of relevance to the business community, particularly in respect to the introduction of potential corrective actions, which this type of leadership is able to implement, thereby improving individual and organisational performance.

This paper is structured as follows: introduction of the study topic; research background and hypothesis development; method; findings; discussion and conclusions; theoretical contributions; implications for management; and the limitations and recommendations for future works.

2. Research background and hypothesis development

2.1 AL

The process of AL combines the positive capacities of the leader and a highly developed organisational context (Luthans and Avolio, 2003). Walumbwa *et al.* (2008) note that AL is a pattern of leadership behaviour that promotes both positive psychological outcomes such as an ethical climate and higher self-awareness and an internalised moral perspective, all of which subsequently produce more balanced information treatment and higher transparency and relational work with followers,

thereby contributing to the positive self-development of followers. The literature reveals that most academic researchers have considered the following dimensions: self-awareness – relates to a deeper understanding of their own strengths and weaknesses and the multifaceted nature of self (Walumbwa *et al.*, 2008); relational transparency – manifests in behaviours to share information, thoughts and real feelings in interpersonal interaction, avoiding inappropriate emotional expressions (Avolio *et al.*, 2004); internalised moral perspective – describes the fact that the leader is guided by standards of moral conduct and acts according to them, to the detriment of the group pressures, organisations or society pressures (Gardner *et al.*, 2005; Walumbwa *et al.*, 2008); and balanced processing – refers to the degree to which the leader objectively analyses all relevant information before making a decision (Kernis, 2003; Walumbwa *et al.*, 2008).

This study aims to respond to the suggestions of researchers (e.g. George *et al.*, 2007) that AL is a good way to achieve lasting and positive results through its ability to stimulate creative ideas, affective commitment and job resourcefulness, all of which combine to improve individual performance. As mentioned above, several researchers have suggested that AL promotes better employees' outcomes and consequently the organisation's performance (Alshammari *et al.*, 2015; Avolio and Mhatre, 2012; Walumbwa *et al.*, 2008, 2010). These outcomes may be reflected in better emotional connection between employees and the organisation and increased willingness to find solutions to the challenges at work, which subsequently increases creative behaviour and the effort to meet set targets, thereby producing better performance. In other words, AL promotes positive relationships between leaders and employees (George, 2003) which results in better attitudes, which in turn, enhances employees' creativity and performance (Leroy *et al.*, 2012; Karatepe and Aga, 2013; Rod and Ashill, 2009). This study adopts a similar perspective to the leader-member exchange (LMX) based on the idea that the dyadic relationships between employees and supervisors may influence the employees' work attitudes and outcomes.

2.2 Affective commitment

Affective commitment consists of personal and emotional attachment to an idea, and in the work context, this relates to employees and their organisations. According to Meyer and Allen (1992), affective commitment refers to the employee's emotional attachment to the organisation. Employees that have strong affective commitment want to stay employed in the organisation. An employee who is affectively committed to the organisation likes to be part of it, since she/he believes in its values and objectives (Allen and Meyer, 2000). The literature reveals that of the three components of organisational commitment (affective, normative and instrumental), the affective dimension has more desirable implications for the individual's behaviour in the organisation. Several studies have sought to determine the causes and effects of affective commitment (e.g. Meyer *et al.*, 2002; Rego *et al.*, 2013). At the same time, several scholars (e.g. Gardner *et al.*, 2005; Kernis, 2003) have revealed that the authentic leader's behaviour embodies principles and values that strive to achieve and maintain open and true relationships; it is probable that the higher the degree of the leader's authenticity as perceived by employees, the stronger the emotional bond that unites them. For example, by being relationally transparent, behaving honestly and adopting a balanced information processing, authentic leaders establish higher quality exchanges with their followers (LMX theory) and they reciprocate with higher affective commitment (Paillé, 2009). Research suggests that the quality of the

exchanges between employees and their leaders is predictive of attitudinal job outcomes like affective commitment (e.g. Gertsner and Day, 1997). Alshammari *et al.* (2015), in turn, suggest that, ethical leaders constantly make efforts to incorporate moral principles, values and beliefs in their behaviour, embodying a commitment to a higher organisational purpose enshrined through prudence, persistence and patience. The authenticity of the leader is positively related to the employee's commitment to the organisation including the emotional attachment (Walumbwa *et al.*, 2008; Leroy *et al.*, 2012; Rego *et al.*, 2013). In view of these various considerations, the following hypothesis is proposed:

H1. Employee perceptions of AL positively influence affective commitment.

2.3 Job resourcefulness

Job resourcefulness is the propensity of individuals to overcome obstacles and garner scarce resources in the pursuit of work-related goals (Licata *et al.*, 2003). It is the ability of people to face various challenges in the workplace looking for solutions to problems in order to achieve individual or organisational targets. Licata *et al.* (2003) characterise this theoretical construct as being influenced by personality traits, including conscientiousness and openness to experience. According to McCrae and John (1992), conscientiousness contains proactive aspects that are revealed in the need for achievement and attachment to work and inhibitor aspects manifested in prudence and moral scruples. Conscientiousness assesses the organisational degree, persistence and motivation for behaviour, that is, oriented towards a particular goal. The openness to experience, in turn, is defined as a factor that predicts the potential tendency of individuals to seek changes (McCrae and John, 1992). Openness to experience has main components as openness to new ideas, intellectual curiosity, fantasy or active imagination, aesthetic sensitivity and a wide range of feelings. It should be noted that it is possible to make the contrast between employees who show participative behaviour, give practical guidance and are conscientious and others who are lazy and careless. However, there is very little research on this topic. In this study, job resourcefulness is considered as a consequence of the perception of AL and as a predictor of creativity and individual performance. Authentic leaders have a strong impact on employees, and this impact is associated with identification with the leaders themselves, hope, trust, positive emotions and optimism (Avolio *et al.*, 2004). These factors can instill within employees a willingness to find solutions to the challenges at work (Licata *et al.*, 2003). Authentic leaders are characterised as being persistent and intrinsically motivated (Rego *et al.*, 2013) and may transmit that internal motivation to employees as a means of encouraging them to overcome obstacles and to seek resources to achieve their work objectives (Licata *et al.*, 2003). It can be said that through a relationship based on transparency, and the sharing and objective analysis of all relevant information before making a decision, the authentic leader presents employees with a role model, who helps them to face the various workplace challenges they encounter and to search for continually better solutions to problems. Thus, the following hypothesis is proposed:

H2. Employee perceptions of AL positively influence job resourcefulness.

2.4 Creativity

Creativity is defined as the production of something for the first time, and in the organisational context, it can result in dramatic change; hence, an exploration of the

concept of creativity can be valuable in attempts to understand the phenomenon of change and, ultimately, organisational efficiency and survival (Woodman *et al.*, 1993). Other scholars simply perceive creativity as an idea that generates new and useful solutions (Amabile, 1988; George and Zhou, 2007). Creativity can be considered one of the main processes through which individuals demonstrate their potential as human beings. In this study, creativity is presented as a consequence of AL, affective commitment and job resourcefulness. As mentioned by Amabile (1988) and Binnewies *et al.* (2008), creativity can be understood as the production of new ideas and solutions that may be related to the type of bond which the individual believes she/he has with the organisation to which she/he belongs. Thus, affective commitment may play a key role in creative behaviour; indeed, workers who show greater affective commitment also demonstrate more creative behaviours (Organ and Ryan, 1995).

Additionally, it is observed that people's ability to obtain scarce resources and overcome obstacles in the achievement of workplace goals (Licata *et al.*, 2003) fosters greater creativity within them. That is, to say, the additional effort that employees are willing to make in their organisations adds value through creative and innovative suggestions. The skills possessed by individuals that enable them to overcome obstacles at work are influential upon their behaviour, making them become more confident, more proactive and more successful in problem solving (Licata *et al.*, 2003). Job resourcefulness requires a certain internal motivation among employees who, in turn, can generate new and useful ideas (Organ and Ryan, 1995).

Leadership and supervision have an essential influence on creativity (Tierney, 2008). Some researchers found that transformational leadership positively relates to creativity (Gong *et al.*, 2009; Shin and Zhou, 2003). Other studies looked at the impact of supervisory behaviours such as supervisory support (Madjar *et al.*, 2002), empowerment (Zhang and Bartol, 2010), supervisory developmental feedback (Zhou, 2003) and supervisory benevolence (Wang and Cheng, 2010) on creativity. George and Zhou (2007) showed that employees exhibited increased creativity when supervisors built a supportive context by providing developmental feedback, being trustworthy or providing interactional justice. Employees' critical thinking is stimulated by AL to the extent that the leaders' authenticity, and in particular their emotional intelligence, plays an important role that enables and supports creativity (Zhou and George, 2001). Being authentic leaders, individuals with higher levels of emotional intelligence and who act according to their words, values and beliefs, contributes to the development and success of interpersonal relationships and a work environment in which creativity is fostered and encouraged (Rego *et al.*, 2013). AL stimulates employees' positive emotions which subsequently increase their creativity (e.g. Fredrickson, 2003; Gavin and Mason, 2004).

Taking into account this discussion of creativity, the following hypotheses are proposed:

H3a. Affective commitment positively influences creativity.

H3b. Job resourcefulness positively influences creativity.

H3c. The perceptions of AL positively influence creativity.

2.5 Individual performance

Individual performance refers to a set of individual behaviours or actions that are relevant to the organisation's goals (Campbell, 1990). Employees who consider work

more as a vocation than a mere job to earn money demonstrate good performance (Rego *et al.*, 2007). The measurement of individual performance, according to Mott (1972), is achieved through three dimensions: productivity, adaptability and flexibility. Productivity evaluates the efficiency and also represents the quantity and quality of the product or service. Adaptability embraces two dimensions: a symbolic adaptation that includes anticipating problems and the satisfactory and timely development of solutions to them, and openness to new methods and technologies applicable to the activities of the organisation, and a behavioural adaptation that refers to the acceptance of solutions and is measured by the speed with which changes are decided and the number of relevant members of the organisation who accept the changes. Moreover, flexibility relates to the employees' ability to rapidly adjust to variations in the amount of work, as well as to respond to crises.

This study considers individual performance to be the result of the affective commitment, job resourcefulness and creativity possessed by the individual concerned. Rego and Souto (2004) argue that affectively committed employees are more willing and motivated to contribute significantly towards the organisation than are employees who are less affectively committed. This assertion echoes that of Meyer and Herscovitch (2001), who believe that a strong affective commitment component can increase the likelihood of the adoption of behaviours that are beneficial to the intended goal. Some authors propose that more affectively committed employees are more likely to better perform their function (e.g. Meyer *et al.*, 2002; Leroy *et al.*, 2012). Undoubtedly, people's ability to overcome obstacles in order to achieve work-related goals implies an internal motivation that influences their behaviour (Licata *et al.*, 2003; Rod and Ashill, 2009), and hence, their performance (Karatepe and Aga, 2013). In respect of job resourcefulness, this also requires some internal motivation on the part of employees to encourage them to develop new and useful ideas (Organ and Ryan, 1995), which in turn, enhance individual performance (Luthans *et al.*, 2007). A "resourceful" collaborator has the capacity to fulfil his/her obligations even when there are difficult circumstances that normally limit the ability to achieve goals successfully (Licata *et al.*, 2003). A creative person has unique features that allow him/her to differentiate him/herself from co-workers, in particular through the exercise of independence, confidence and preparedness to take risk (Sternberg and Lubart, 1999). These attributes promote greater flexibility within such an individual, thus making that person more adaptable and open to new experiences. Luthans *et al.* (2007) argue that the most creative collaborators are continually looking for challenges and strive to meet set targets, thereby producing better performance. In view of these arguments, the following proposed hypotheses are formulated:

- H4a.* Affective commitment positively influences individual performance.
- H4b.* Job resourcefulness positively influences individual performance.
- H5.* Creativity positively influences individual performance.

3. Method

The study was carried out in Cape Verdean organisations, more specifically, the Santiago and São Vicente Islands, and 543 employees participated. Of these, 56 per cent were female, the average age was 33 years old, 59.7 per cent held college degrees and 46 per cent held leadership positions. Moreover, 80 per cent belonged to the service sector and 53.6 per cent were in the public sector; 32 per cent of the organisations

represented had between 51 and 100 employees. The data collection period ran from April to July 2014, and the following procedures were adopted to gather that data: after the first contact with the organisations' leaders, and in the case of a positive answer, the person responsible for each work team and/or department was identified and a request to distribute a questionnaire to some random employees was made; the questionnaires were accompanied by a letter explaining the purpose of the research and giving a guarantee of maximum confidentiality of data and anonymity of the participants; some instructions regarding how to complete the questionnaire and thus prevent all possible error were provided; and it was requested that on completion, the questionnaire be placed in the envelope provided and closed in the presence of the researcher.

3.1 Measures

3.1.1 AL. Perceptions of AL were measured by the 16 five-point items of the Authentic Leadership Questionnaire (ALQ) (Copyright © 2007 ALQ by Bruce J. Avolio, William L. Gardner and Fred O. Walumbwa). The ALQ measures four dimensions: self-awareness, relational transparency, internalised moral perspective and balanced processing. The Portuguese version, as translated and back-translated by Rego *et al.* (2012), was used, and it contains 16 items. Individuals reported the frequency (1: never, ..., 5: often, if not always) with which their supervisors adopted the 16 behaviours/attitudes on a five-point Likert-type scale. The data were subjected to confirmatory factor analysis (CFA) (see Table I). From the first-order CFA, it is observed that the factor loading ranged between 0.64 and 0.81, and from the Cronbach's α s, it is seen that the dimensions are greater than 0.8, thus revealing factorial validity and reliability of measures. The fit indices ($\chi^2/df = 1.72$; RMSEA = 0.04; GFI = 0.96; CFI = 0.98; TLI = 0.98) suggest that the model fits very well with the data. In the second-order CFA, the results do not differ much, experiencing the same factor loading, Cronbach's α s and fit indices. However, from the first-order CFA, it was found that the four dimensions of AL are highly correlated, which, in turn, indicates the existence of a latent variable or factor (Marôco, 2014). Thus, AL is deemed as a second-order variable as suggested by Walumbwa *et al.* (2008).

3.1.2 Creativity. Creativity was measured according to the instrument developed and validated by Zhou and George (2001) which comprises 13 items measured on a five-point Likert-type scale (1: the statement does not apply absolutely anything at all to me; ..., 5: this statement completely applies to me). Examples of items are "I'm not afraid to take risks" and "I suggest new ways of performing work tasks". Data about creativity also show reliability and factorial validity of the measures (Cronbach's α greater than 0.8 and factor loading ranging from 0.59 to 0.70). According to Hair *et al.* (1992), factor loadings greater than 0.30 may be considered significant, while loadings over 0.50 are considered very significant.

3.1.3 Individual performance. Individual performance was measured by an instrument developed by Mott (1972), consisting of ten items that are subdivided into three dimensions (productivity, adaptability and flexibility). Employees were asked about their performance in comparison with that of their colleagues via statements on a five-point Likert-type scale (1: below average, ..., 5: excellent). The data were also subjected to the CFA (see Table II). In the first-order CFA, factor loading range from 0.63 to 0.79, and Cronbach's α s are greater than 0.7, showing factorial validity and reliability of the measures. The adjustment indices suggest that the model fits the data well ($\chi^2/df = 2.1$; RMSEA = 0.04; GFI = 0.98; CFI = 0.99; TLI = 0.98). In the second-order CFA, the results do not change from that of the first-order CFA.

Dimensions	1st-order model		2nd-order model	
	FL	α	FL	α
<i>Self-awareness</i>		0.80		0.80
Seeks to obtain information (feedback) of people to improve the working relationships between them	0.74		0.74	
Understand how their actions impact on others	0.66		0.67	
Know when it is time to reevaluate and change their positions on important issues	0.71		0.70	
Have a clear sense of how others perceive their (his/her) ability	0.74		0.74	
<i>Relational transparency</i>		0.82		0.82
Shows the emotions that match what you feel	0.64		0.64	
Encourages all people to say what they think	0.73		0.73	
Says exactly what he thinks	0.74		0.74	
Tells the hard truths	0.65		0.66	
Assume the errors he commits	0.69		0.69	
<i>Moral internal perspective</i>		0.81		0.81
Makes decisions based on their core values	0.68		0.68	
Take tough decisions based on high-ethical standards	0.68		0.68	
Asks me to take positions according to my core values	0.75		0.75	
Their actions are consistent with their beliefs and convictions	0.75		0.75	
<i>Balanced processing</i>		0.81		0.81
Analyse relevant information before making a decision	0.74		0.75	
Carefully listen to the different points of view before drawing conclusions	0.81		0.81	
Calls me views which question their (his/the) deepest positions	0.76		0.76	
<i>Authentic leadership</i>				0.99
<i>Self-awareness</i>			0.97	
<i>Relational transparency</i>			0.95	
<i>Moral internal perspective</i>			0.87	
<i>Balanced processing</i>			0.85	
χ^2/df	1.72		1.71	
Root mean square error of approximation	0.04		0.04	
Goodness of fit index	0.96		0.96	
Comparative fit index	0.98		0.98	
Tucker-Lewis coefficient	0.98		0.98	

Note: FL, factor loading

Table I.
Authentic
leadership:
confirmatory
factor analysis

In the first-order CFA, the dimensions showed high correlations between them, which indicates the existence of a higher order construct, so that the second-order CFA was considered.

3.1.4 Affective commitment. Affective commitment was measured by the six items of the Meyer *et al.* (1993) scale. Employees were asked to indicate the extent of their agreement with the statements presented by using a five-point Likert scale (1: strongly disagree, ..., 5: strongly agree). Sample items included "I really feel the problems of this organisation as if they were my own" and "This organisation has great personal meaning to me". The results of the CFA show reliability and factorial validity of the measures (Cronbach's α is 0.8 and factor loading range from 0.59 to 0.85), which are higher than minimum value recommended by Hair *et al.* (1992).

3.1.5 Job resourcefulness. To measure job resourcefulness, the instrument developed by Licata *et al.* (2003) was used. This contains four items measured using a Likert scale with five points (1: strongly disagree, ..., 5: strongly agree). Examples of items included

LODJ 37,8	Dimensions	1st-order model		2nd-order model	
		FL	α	FL	α
1046	<i>Productivity</i>		0.77		0.77
	Compared with their colleagues, which of the following best describes how your supervisor ranked last formal performance review?	0.63		0.63	
	Compared with the productivity levels of your colleagues, as do you rate your level of production in quantity?	0.76		0.76	
	Compared with your colleagues, how would you rate the quality of your work?	0.79		0.78	
	<i>Adaptability</i>		0.82		0.82
	Compared with your colleagues, which is the level of efficiency of your work? In other words, to what extent do you use appropriately the resources (money, people, equipment, etc.)?	0.70		0.70	
	Compared with your colleagues, which is your effectiveness in adapting to changes in work?	0.79		0.79	
	Compared with your colleagues, which is your quickness to adapt to changes in work?	0.76		0.76	
	<i>Flexibility</i>		0.73		0.73
	Compared with your colleagues, how would you rate your ability to adjust to changes in work mode?	0.75		0.75	
	Compared with your colleagues, how do you evaluate your reaction to situations concerning emergency (such as seizures, short deadlines, unexpected personal issues, allocation of resources, problems, etc.)?	0.65		0.65	
	Compared with your colleagues, how do you assess the quality of your response to emergency situations related?	0.65		0.65	
	<i>Individual performance</i>				0.89
	<i>Productivity</i>				0.78
	<i>Adaptability</i>				0.96
	<i>Flexibility</i>				0.95
χ^2/df	2.1			2.1	
Root mean square error of approximation	0.04			0.04	
Goodness of fit index	0.98			0.98	
Comparative fit index	0.99			0.99	
Tucker-Lewis coefficient	0.98			0.98	
Note: FL, factor loading					

Table II.
Individual
performance:
confirmatory
factor analysis

“I am very intelligent and enterprising in the execution of my work” and “I am imaginative when it comes to overcoming obstacles in my work”. The data submitted to CFA also show the reliability and factorial validity of the measures (Cronbach’s α is 0.8 and factor loading vary within 0.63 and 0.79).

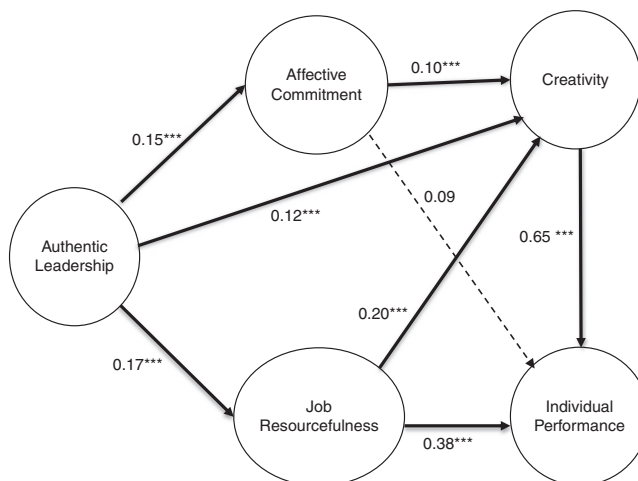
3.2 Reliability and validity

Initially, the CFA was conducted to test the measurement model, and the psychometric properties of the scales used seem to be in agreement with the reference values (Hair *et al.*, 2005). Thereafter, the CFA was conducted for the structural model and included all the variables within it. The indices were adjusted (e.g. $\chi^2/df=1.6$; RMSEA = 0.03; GFI = 0.89; CFI = 0.94; TLI = 0.95). Through analysis of the standardised residuals and the modification indices for the sources of mis-specification, seven items were removed and a well-fitting 41-item and ten-dimensional model emerged, whose indices were (e.g. $\chi^2/df=1.4$; RMSEA = 0.02;

GFI = 0.91; CFI = 0.96; TLI = 0.96) (see Figure 1). The α values are all above 0.7, and the composite reliabilities (CR) is equal to or greater than 0.7. These data present convergent validity, the average variance extracted (AVE) is greater than 0.5, except creativity (0.32). The outcome measures seem to be reliable according to Hair *et al.* (2005). Discriminant validity is evidenced because all the correlations between constructs are significantly below 1 and all the squared correlations are smaller than the AVE (see Table III).

3.3 Common method variance

To minimise the risk of common method variance, we used some procedural methods proposed by Podsakoff *et al.* (2003): the total respondents were guaranteed anonymity and confidentiality of information collected and were told that there was no right or wrong answers; there was randomness in the ordering of multiple items; we did not use scales with bipolar numerical values or assign verbal designations for the midpoints of



Notes: $\chi^2/\text{g}1=1.4$; RMSEA=0.02; GFI=0.91; CFI=0.96; TLI=0.96. *** $p < 0.001$

Figure 1.
Analysis of
structural
equation model

	Mean	SD	1	2	3	4	5	CR	AVE
1. Authentic leadership (AL)	3.46	0.69	<i>0.91</i> (0.99)					0.95	0.83
2. Affective commitment (AC)	3.40	0.58	0.28**	<i>0.73</i> (0.80)				0.81	0.53
3. Job resourcefulness (JR)	3.89	0.52	0.26**	0.13**	<i>0.74</i> (0.81)			0.79	0.55
4. Creativity (C)	3.66	0.49	0.46**	0.27**	0.45**	<i>0.57</i> (0.88)		0.89	0.32
5. Individual performance (IP)	3.50	0.57	0.31**	0.19**	0.52**	0.53**	<i>0.78</i> (0.89)	0.82	0.61

Notes: The numbers in parentheses on the diagonal represent Cronbach's α s and the numbers italics represent square root of AVE. ** $p < 0.01$

Table III.
Means, standard
deviations,
correlations,
Cronbach's α s,
composite reliability
and average
variance extracted

the scales. The test of the single factor (Harman, 1967) was also carried out. A principal component analysis (unrotated solution) on all the variables revealed eight factors with eigenvalues greater than 1. They accounted for 56 per cent of the total variance, the first of which explained only 24 per cent of the variance. The technique of marker variable (Lindell and Whitney, 2001) was used by including a variable “purchase behaviour”, in the statistical analysis, which is not correlated with any of the variables of the model. All methods used show there are no problems with common method variance.

4. Findings

Table III presents the means, standard deviations, Cronbach’s α , correlations, and CR, AVE of all key variables, and shows that all variables correlate positively with each other. AL is positively correlated with all other variables. There are also positive correlations between employees’ affective commitment, their perceptions of AL, job resourcefulness, creativity and individual performance. Similarly, job resourcefulness was positively associated with perceptions of AL, employees’ affective commitment, creativity and individual performance. Creativity, in turn, is shown to positively associate with all other variables. Finally, individual performance also behaved similarly, showing positive and significant correlations with AL, affective commitment, job resourcefulness and creativity.

The results (see Table IV) show that AL exerts a positive and statistically significant effect on EA ($\beta = 0.15, p < 0.001$). Consequently, the *H1* was supported. The AL variable also influences positively and significantly job resourcefulness ($\beta = 0.17, p < 0.001$), thus supporting *H2*. Affective commitment has a positive and significant influence on creativity ($\beta = 0.10, p < 0.05$). Job resourcefulness, in turn, is related to and significantly positive with creativity ($\beta = 0.20, p < 0.001$). AL also exerted a positive and statistically significant effect on creativity ($\beta = 0.12, p < 0.001$). The *H3a, H3b* and *H3c* are, therefore, supported.

Affective commitment appears to have no effect on individual performance ($\beta = 0.09, p = 0.11$). Job resourcefulness already has a positive and significant effect on individual performance ($\beta = 0.38, p < 0.001$). *H4b* was partially supported, whereas *H4a* was not supported.

Finally, creativity was seen to relate in a positive and statistically significant way with individual performance ($\beta = 0.65, p < 0.001$), supporting *H5*.

5. Discussion and conclusions

The results show the predictive power of AL with respect to affective commitment, suggesting that the perceptions of employees regarding their leaders’ authenticity influence their emotional attachment to the organisation. This result coincides with those

Hypothesis	Relations	Estimate	SE	CR	p	Conclusion
<i>H1</i>	AC←AL	0.150	0.029	5.155	***	Supported
<i>H2</i>	JR←AL	0.168	0.034	4.969	***	
<i>H3a</i>	C←AC	0.102	0.035	2.957	0.003	Rejected
<i>H3b</i>	C←JR	0.197	0.038	5.111	***	
<i>H3c</i>	C←AL	0.118	0.024	5.002	***	
<i>H4a</i>	IP←AC	0.093	0.058	1.612	0.107	
<i>H4b</i>	IP←JR	0.378	0.062	6.111	***	
<i>H5</i>	IP←C	0.647	0.137	4.731	***	Supported

Table IV.
Standardised
regression: summary

Notes: *** $p < 0.001$

of studies by Gardner *et al.* (2005), which suggest that employees are much more emotionally committed in the execution of their tasks and have a greater focus on achieving their objectives when their perceptions of their leaders' authenticity are strong (Darvish and Rezaei, 2011; Leroy *et al.*, 2012). The *H2* was confirmed, the results demonstrating that employees are predisposed to finding solutions to their daily work problems and to overcome any obstacles encountered when they perceive certain characteristics among their leaders, such as self-awareness, relational transparency, an internal moral perspective and the balanced processing of information. The real leader has the ability to instill hope, confidence, optimism and positive emotions in employees (Avolio *et al.*, 2004), all of which subsequently contribute to increase employees' willingness to seek ways of effectively addressing challenges at work (Licata *et al.*, 2003).

It is also shown by the results that affective commitment explains employees' creativity, suggesting that when they are affectively committed to the organisation, employees develop more creative ideas. As noted by Isen *et al.* (1987), the happiest people tend to be more creative. Creative attitudes are related to sensitivity to problems, attraction to complexity, autonomy, self-confidence (Barron and Harrington, 1981), persistence, professional achievement and dedication to work (Rice, 2006). These are features that promote the establishment of an affectionate bond between the individual and the organisation and determine how individuals' creativity is influenced. The result from the study is consistent with that of the existing literature, which reports that employees who demonstrate greater affective commitment tend to show more creative behaviour (Organ and Ryan, 1995). Job resourcefulness also seems to have an impact on employees' creative spirit. Individuals' ability to garner scarce resources and overcome obstacles in trying to achieve work goals (Licata *et al.*, 2003) stimulates their creativity, and the internal motivation involved in this mind-set contributes towards the production of more new and useful ideas (Organ and Ryan, 1995).

AL, in turn, shows a positive influence on employees' creativity, suggesting, as noted by several scholars (Avolio *et al.*, 2004; Gardner *et al.*, 2005) that through their characteristics, they foster greater enthusiasm among employees for them to present creative ideas, solve problems and take advantage of opportunities for the benefit of the organisation. Individuals must be psychologically comfortable in order to be creative (West and Altink, 1996). Hence, the *H3* was also supported.

Contrary to what was predicted and what other studies have shown (e.g. Meyer and Herscovitch, 2001; Meyer *et al.*, 2002), the employees' emotional bonds towards the organisation did not influence their individual performance. This finding may be related to the participants' cultural traits, which predispose their performance to be dependent not on an affectionate bond with the organisation but on other factors, including job resourcefulness and creativity. It also coincides with the outcome obtained by Mehrabi *et al.* (2013), who found no relationship between organisational commitment and performance and particularly organisational citizenship behaviours. A "weak relationship between affective commitment and CCO" (an important component of individual performance) was found and discussed in previous research (Carmeli and Colakoglu, 2005, p. 77). For example, Carmeli and Colakoglu (2005) proposed emotional intelligence to moderate the relationship between affective commitment and CCO. In other words, they found that this positive relationship is strongest for individuals with higher emotional intelligence. This result from our study suggests the need for further investigations showing that this relationship may be an indirect one or subject of strong moderating effects, since the low correlations with other variables eliminate the possibility of multicollinearity.

Job resourcefulness has already been shown to influence individual performance. This result suggests that employees' performance is influenced by the internal motivation to seek to overcome obstacles in order to achieve goals related to their work (Licata *et al.*, 2003; Karatepe and Aga, 2013). Job resourcefulness influences in a positive and meaningful way those employees who seek to perform their work well (Rod and Ashill, 2009).

Finally, the results suggest that high levels of individual performance are influenced by the creative and innovative spirit of employees (Rashid *et al.*, 2004). When individuals are creative, they are always looking for challenges and strive to meet the goals set, thus exhibiting higher levels of performance (Avolio *et al.*, 2004; Luthans *et al.*, 2007).

6. Theoretical contributions

Some researchers (e.g. Avolio and Mhatre, 2012; Gardner *et al.*, 2011) have argued that more empirical research is necessary to understand the mechanisms through which AL influences effective employees' responses and to expand the nomological network for AL. Thus, this study responds to this call showing the chain of effects between AL and employees' performance. This investigation helps to explain this process suggesting that AL predicts employees' attitudes like affective commitment and job resourcefulness, which in turn, explain their behaviour expressed on their creativity and individual performance. The results are significant because they support theory and new empirical research, suggesting that the quality of working conditions created by leaders may play an important role in the extent to which employees develop better attitudes, a creative spirit and an increased performance. Authenticity may enhance the ability of leaders to improve the social climate, to empower employees and to boost creativity and performance. Constructs like AL and job resourcefulness are underexplored in the literature. Hence, this study is revealing that they deserve additional attention from both researchers and practitioners.

7. Implications for management

The results from this study can help managers to encourage creativity and good performance from their employees through AL, affective commitment and job resourcefulness. Hence, by implication, the research outcomes suggest that organisations should focus on training leaders who value self-awareness, transparency in their relationships with others, display an internal moral perspective and demonstrate balanced processing of information, in order to guarantee good results at the individual level and, consequently, at the organisational level. Indirectly, the study also suggests that organisations should focus on selecting leaders with authentic features and implement appropriate training activities, coaching and development that aim to increase AL since this may well result in a positive impact on employees' attitudes and behaviour. Leaders must act in a trustful, honest, respectful and courteous way, cultivating their credibility, thus enhancing employees' job resourcefulness, affective commitment and creativity. According to George (2003), by "leading with heart", leaders are more able to establish closer relationships with colleagues and employees. Authentic leaders must understand the importance of positive relationships with employees, since the quality of relationships may be an important determinant of success. Showing how AL promotes individual attitudes and how these attitudes influence creativity and individual performance, this study helps organisations and their leaders to boost employees and organisations' outcomes.

8. Limitations and recommendations for future work

The study focusses on just two of the islands of Cape Verde as it was not possible to conduct fieldwork on all the islands due to the distance between them. Thus, opportunities remain to collect data from the other islands, thereby widening the picture. In respect of the research population, a convenience sample was surveyed whose representation might be questionable. Moreover, a further limitation concerns the collection of data at a single moment in time and through the same source, which may involve common method variance (Podsakoff *et al.*, 2003). That said, certain preventative measures were undertaken, such as the Harman test, the marker variable and other procedures described earlier to reduce or eliminate such variance. Nonetheless, future studies should collect the data at different points in time or via a multiple-source method. The non-inclusion of moderating variables in the study can also be considered a limitation. Future studies should investigate whether other variables like affective well-being, satisfaction with management or organisational identification mediate or moderate the relationship between AL, creativity and individual performance. Irrespective of these known shortcomings, however, the study contributes to the organisational studies literature in its consideration of the influence of AL on employee behaviour and performance and opens new avenues of research.

References

- Allen, N. and Meyer, J. (2000), "Construct validation in organizational behavior research: the case of organizational commitment", in Goffin, R.D. and Helmes, E. (Eds), *Problems and Solutions in Human Assessment, Honoring Douglas N. Jackson at Seventy*, Kluwer, Norwell, MA, pp. 285-314.
- Alok, K. (2014), "Authentic leadership and psychological ownership: investigation of interrelations", *Leadership and Organization Development Journal*, Vol. 35 No. 4, pp. 266-285.
- Alshammari, A., Almutairi, N. and Thuwaini, F. (2015), "Ethical leadership: the effect on employees", *International Journal of Business and Management*, Vol. 10 No. 3, pp. 108-116.
- Amabile, T. (1988), "A model of creativity and innovation in organizations", *Research in Organizational Behavior*, Vol. 10 No. 2, pp. 123-167.
- Avolio, B. and Gardner, W. (2005), "Authentic leadership development: getting to the root of positive forms of leadership", *The Leadership Quarterly*, Vol. 16 No. 3, pp. 315-338.
- Avolio, B., Gardner, W., Walumbwa, F.O., Luthans, F. and May, D.R. (2004), "Unlocking the mask: a look at the process by which authentic leaders impact follower attitudes and behaviors", *The Leadership Quarterly*, Vol. 15 No. 6, pp. 801-823.
- Avolio, B.J. and Mhatre, K.H. (2012), "Advances in theory and research on authentic leadership", in Cameron, K.S. and Spreitzer, G. (Eds), *The Oxford Handbook of Positive Organizational Scholarship*, Oxford University Press, Oxford, pp. 773-783.
- Barron, F.B. and Harrington, D.M. (1981), "Creativity, intelligence, and personality", *Annual Review of Psychology*, Vol. 32 No. 1, pp. 439-476.
- Binnewies, C., Ohly, S. and Niessen, C. (2008), "Age and creativity at work: the interplay between job resources, age and idea creativity", *Journal of Managerial Psychology*, Vol. 23 No. 4, pp. 438-457.
- Campbell, J. (1990), "Modeling the performance prediction problem in industrial and organizational psychology", in Dunnette, M. and Hough, L. (Eds), *Handbook of Organizational and Industrial Psychology*, Consulting Psychologists Press, Palo Alto, CA, pp. 687-732.

- Carmeli, A. and Colakoglu, S.N. (2005), "The relationship between affective commitment and organizational citizenship behaviors: the moderating role of emotional intelligence", *Research on Emotion in Organizations*, Vol. 1, pp. 77-93.
- Darvish, H. and Rezaei, F. (2011), "The impact of authentic leadership on job satisfaction and team commitment", *Management & Marketing Challenges for the Knowledge Society*, Vol. 6, No. 3, pp. 421-436.
- Fredrickson, B. (2003), "The value of positive emotions", *American Scientist*, Vol. 91 No. 4, pp. 330-335.
- Gardner, W.L., Cogliser, C.C., Davis, K.M. and Dickens, M.P. (2011), "Authentic leadership: a review of the literature and research agenda", *The Leadership Quarterly*, Vol. 22 No. 6, pp. 1120-1145.
- Gardner, W., Avólio, B., Luthans, F., May, D. and Walumbwa, F. (2005), "Can you see the real me? A self-based model of authentic leader and follower development", *The Leadership Quarterly*, Vol. 16 No. 6, pp. 343-372.
- Gavin, J.H. and Mason, R.O. (2004), "The virtuous organization: the value of happiness in the workplace", *Organizational Dynamics*, Vol. 33 No. 4, pp. 379-392.
- George, J. and Zhou, J. (2007), "Dual tuning in a supportive context: joint contributions of positive mood, negative mood, and supervisory behaviors to employee creativity", *Academy of Management Journal*, Vol. 50 No. 3, pp. 605-622.
- George, W. (2003), *Authentic Leadership: Rediscovering the Secrets to Creating Lasting Value*, Jossey-Bass, San Francisco, CA, pp. 11-45.
- George, W., Sims, P., McLean, A. and Mayer, D. (2007), "Discovering your authentic leadership", *Harvard Business Review*, Vol. 85 No. 2, pp. 129-138.
- Gertsner, C.R. and Day, D.V. (1997), "Meta-analytic review of leader-member exchange theory: correlates and construct issues", *Journal of Applied Psychology*, Vol. 82 No. 6, pp. 827-844.
- Gong, Y., Huang, J. and Farh, J. (2009), "Employee learning orientation, transformational leadership, and employee creativity: the mediating role of employee creative self-efficacy", *Academy of Management Journal*, Vol. 52 No. 4, pp. 765-778.
- Hair, J.F., Rolph, E.A., Ronald, L.T. and William, C.B. (1992), *Multivariate Data Analysis with Readings*, 3rd ed., Macmillan Publishing, New York, NY.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. and Tatham, R.L. (2005), *Multivariate Data Analysis*, 6th ed., Pearson Prentice Hall, Upper Saddle River, NJ.
- Harman, H.H. (1967), *Modern Factor Analysis*, University of Chicago Press, Chicago, IL.
- Ilies, R., Morgeson, P. and Nahrgang, D. (2005), "Authentic leadership and eudaemonic well-being: understanding leader-follower outcomes", *The Leadership Quarterly*, Vol. 16, pp. 373-394.
- Isen, M., Daubman, A. and Nowicki, P. (1987), "Positive affect facilitates creative problem solving", *Journal of Personality and Social Psychology*, Vol. 52 No. 6, pp. 1122-1131.
- Karatepe, O.M. and Aga, M. (2013), "The effect of job resourcefulness on role stress, emotional exhaustion and overall performance: a study of frontline bank employees", *Journal of Financial Services Marketing*, Vol. 18 No. 2, pp. 91-105.
- Kernis, M. (2003), "Toward a conceptualization of optimal self-esteem", *Psychological Inquiry*, Vol. 14 No. 1, pp. 1-26.
- Leroy, H., Palanski, M. and Simons, T. (2012), "Authentic leadership and behavioral integrity as drivers of follower commitment and performance", *Journal of Business Ethics*, Vol. 107 No. 3, pp. 255-264.
- Licata, J.W., Mowen, J.C., Harris, E.G. and Brown, T.J. (2003), "On the trait antecedents and outcomes of service worker job resourcefulness: a hierarchical model approach", *Journal of the Academy of Marketing Science*, Vol. 31 No. 3, pp. 256-271.

- Lindell, M.K. and Whitney, D.J. (2001), "Accounting for common method variance in cross-sectional research designs", *Journal of Applied Psychology*, Vol. 86 No. 1, pp. 114-121.
- Luthans, F. and Avolio, B. (2003), "Authentic leadership: a positive development approach", in Cameron, K.S., Dutton, J.E. and Quinn, R.E. (Eds), *Positive Organizational Scholarship*, Berrett-Koehler, San Francisco, CA, pp. 241-258.
- Luthans, F., Youssef, C.M. and Avolio, B.J. (2007), *Psychological Capital, Developing the Human Competitive Edge*, Oxford University Press, New York, NY.
- McCrae, R. and John, O. (1992), "An introduction to the five-factor model and its applications", *Journal of Personality*, Vol. 60 No. 2, pp. 174-214.
- Madjar, N., Oldham, G.R. and Pratt, M.G. (2002), "There's no place like home? The contributions of work and nonwork creativity support to employees' creative performance", *Academy of Management Journal*, Vol. 45 No. 4, pp. 757-767.
- Marôco, J. (2014), "Análise de Equações Estruturais: Fundamentos Teóricos, Software & Aplicações, Pêro Pinheiro", report, Lisboa.
- Mehrabi, J., Alemzadeh, M., Jadidi, M. and Mahdevar, N. (2013), "Explaining the relation between organizational commitment and dimensions of organizational citizenship behavior case study: textile factories in borujerd county", *Interdisciplinary Journal of Contemporary Research in Business*, Vol. 5 No. 8, pp. 121-132.
- Meyer, J.P. and Allen, N.J. (1992), "A three-component conceptualization of organizational commitment", *Human Resource Management Review*, Vol. 1, pp. 61-89.
- Meyer, J.P. and Herscovitch, L. (2001), "Commitment in the workplace: toward a general model", *Human Resource Management Review*, Vol. 11 No. 3, pp. 299-326.
- Meyer, J.P., Allen, N.J. and Smith, C.A. (1993), "Commitment to organizations and occupations: extension and test of a three-component conceptualization", *Journal of Applied Psychology*, Vol. 78 No. 4, pp. 538-551.
- Meyer, J.P., Stanley, D.J., Herscovitch, L. and Topolnysky, L. (2002), "Affective, continuance, and normative commitment to the organization: a meta-analysis of antecedents, correlates, and consequences", *Journal of Vocational Behavior*, Vol. 61 No. 1, pp. 20-52.
- Mott, P.E. (1972), *The Characteristics of Effective Organizations*, Harper & Row, New York, NY.
- Nazari, K. and Emami, M. (2012), "Leadership a critical review of the concept", *Interdisciplinary Journal of Contemporary Research in Business*, Vol. 3 No. 9, pp. 545-553.
- Organ, D. and Ryan, K. (1995), "A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior", *Personnel Psychology*, Vol. 48 No. 4, pp. 775-802.
- Paillé, P. (2009), "The relationship between support, commitment and intent to leave team: a social exchange perspective2", *Team Performance Management*, Vol. 15 Nos 1/2, pp. 49-62.
- Podsakoff, M., MacKenzie, S.B., Lee, J. and Podsakoff, N.P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903.
- Rashid, Z.A., Sambasivan, M. and Rahman, A. (2004), "The influence of organizational culture on attitudes toward organizational change", *Leadership and Organization Development Journal*, Vol. 25 No. 2, pp. 161-179.
- Rego, A. and Souto, S. (2004), "Comprometimento organizacional em organizações autênticas: um estudo luso-brasileiro", *Revista de Administração de Empresas*, Vol. 44 No. 3, pp. 30-43.
- Rego, A., Sousa, F., Marques, S. and Cunha, M.P. (2012), "Authentic leadership promoting employees' psychological capital and creativity", *Journal of Business Research*, Vol. 65, pp. 429-437.

- Rego, A., Sousa, F., Cunha, M.P., Correia, A. and Saur-Amaral, I. (2007), "Leader self-reported emotional intelligence and perceived employee creativity: an exploratory study", *Creativity and Innovation Management*, Vol. 16 No. 3, pp. 250-263.
- Rego, A., Vitória, A., Magalhães, A., Ribeiro, N. and Cunha, M.P. (2013), "Are authentic leaders associated with more virtuous, committed and potente teams?", *The Leadership Quartetly*, Vol. 24, pp. 61-79.
- Rice, G. (2006), "Individual values, organizational context, and self-perceptions of employee creativity: evidence from Egyptian organizations", *Journal of Business Research*, Vol. 59 No. 2, pp. 233-241.
- Rod, M. and Ashill, A. (2009), "Symptoms of burnout and service recovery performance: the influence of job resourcefulness", *Managing Service Quality*, Vol. 19 No. 1, pp. 60-84.
- Shahid, N.K. (2010), "Impact of authentic leaders on organization performance", *International Journal of Business and Management*, Vol. 5 No. 12, pp. 167-172.
- Shin, S.J. and Zhou, J. (2003), "Transformational leadership, conservation, and creativity: evidence from Korea", *Academy of Management Journal*, Vol. 46 No. 6, pp. 703-714.
- Silva, P. and Torres, C. (2010), *Gestão e Liderança para profissionais de TI*, Lidel- edições técnicas, Lisboa.
- Sternberg, R.J. and Lubart, T.L. (1999), "The concept of creativity: prospects and paradigms", in Sternberg, R.J. (Ed.), *Handbook of Creativity*, Cambridge University Press, London, pp. 3-16.
- Tierney, P. (2008), "Leadership and creativity", in Zhou, J. and Shalley, C.E. (Eds), *Handbook of Organizational Creativity*, Erlbaum, Hillsdale, NJ, pp. 95-124.
- Walumbwa, F., Avolio, B., Gardner, W., Wernsing, T. and Peterson, S. (2008), "Authentic leadership: development and validation of a theory-based measure", *Journal of Management*, Vol. 34 No. 1, pp. 89-126.
- Walumbwa, F.O., Wang, P., Wang, H., Schaubroeck, J. and Avolio, B. (2010), "Psychological processes linking authentic leadership to follower behaviors", *The Leadership Quarterly*, Vol. 21 No. 5, pp. 901-914.
- Wang, A. and Cheng, B. (2010), "When does benevolent leadership lead to creativity? The moderating role of creative role identity and job autonomy", *Journal of Organizational Behavior*, Vol. 31 No. 1, pp. 106-121.
- West, A. and Altink, M. (1996), "Innovation at work: individual, group, organizational, and socio-historical perspectives", *European Journal of Work and Organizational Psychology*, Vol. 5 No. 1, pp. 3-11.
- Wong, C.A., Spence Laschinger, H.K. and Cummings, G.G. (2010), "Authentic leadership and nurses' voice behaviour and perceptions of care quality", *Journal of Nursing Management*, Vol. 18 No. 8, pp. 889-900.
- Woodman, R.W., Sawyer, J.E. and Griffin, R.W. (1993), "Toward a theory of organizational creativity", *Academy of Management Review*, Vol. 18 No. 2, pp. 293-321.
- Zhang, X. and Bartol, K.M. (2010), "Linking empowering leadership and employee creativity: the influence of psychological empowerment, intrinsic motivation, and creative process engagement", *Academy of Management Journal*, Vol. 53 No. 1, pp. 107-128.
- Zhou, J. (2003), "When the presence of creative coworkers is related to creativity: role of supervisor close monitoring, developmental feedback, and creative personality", *Journal of Applied Psychology*, Vol. 88 No. 3, pp. 413-422.
- Zhou, J. and George, J. (2001), "When job dissatisfaction leads to creativity: encouraging the expression of voice", *Academy of Management Journal*, Vol. 44 No. 4, pp. 682-696.

Further reading

- Avolio, B. and Luthans, F. (2006), "The high impact leader: moments matter in accelerating", *Authentic Leadership Development*, McGraw-Hill Professional, New York, NY, 224pp.
- Brewerton, P. and Millward, L. (2001), *Organisational Research Methods*, Sage Publications Ltd, London.
- George, J. (2007), "Creativity in organizations", *Academy of Management Annals*, Vol. 1, pp. 439-477.
- Meyer, J.P. and Smith, C.A. (2000), "HRM practices and organizational commitment: test of a mediation model", *Canadian Journal of Administrative Sciences*, Vol. 17 No. 4, pp. 319-331.
- Rego, A., Leite, R., Carvalho, T., Freire, C. and Vieira, A. (2004), "Organizational commitment: toward a different understanding of the ways people feel attached to their organizations", *Management Research*, Vol. 2 No. 3, pp. 201-218.
- Shamir, B. and Eilam, G. (2005), "What's your story?: a life-stories approach to authentic leadership development", *The Leadership Quarterly*, Vol. 16 No. 3, pp. 395-417.

About the authors

Ana Suzete Dias Semedo is a PhD Candidate in Business Management at the Faculty of Economics, University of Coimbra. Ana Suzete Dias Semedo is the corresponding author and can be contacted at: asd.semedo@gmail.com

Arnaldo Fernandes Matos Coelho has a PhD and is a Professor at the Faculty of Economics, University of Coimbra.

Neuza Manuel Pereira Ribeiro has a Postdoctoral Degree and is a Professor at the School of Technology and Management, CIGS, Polytechnic Institute of Leiria.

For instructions on how to order reprints of this article, please visit our website:

www.emeraldgroupublishing.com/licensing/reprints.htm

Or contact us for further details: permissions@emeraldinsight.com