ASSESSING THE IMPACT OF COMPETENCY MANAGEMENT ON ORGANIZATIONAL LEARNING: A CASE OF THE UNIVERSITY OF DJELFA, ALGERIA

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Purpose. This study investigated the effect of competency management (CM) on organizational learning (OL) for faculty members in two colleges in University of Djelfa-Algeria during the period 2021–2022. In particular, the effect of recruitment of competencies on the organizational learning, development of competencies, compensation of competencies, assessing of competencies was studied.

Results. The findings of this study provide interesting data about the universities, we found a positive relationship between competencies management and organizational learning, and the study showed that all of the practices of competencies management (recruitment of competencies, development of competencies, compensation of competencies, assessing of competencies) had a direct positive effect on organizational learning for faculty members in two colleges in University of Djelfa-Algeria.

Scientific novelty. Scientific novelty of the study lies in the clarification of promising directions for the development of the practices of competencies management (recruitment of competencies, development of competencies, compensation of competencies, assessing of competencies) and their effect on organizational learning of faculty members.

Practical value. This study will be of great importance to the faculty members of the two colleges in University of Djelfa-Algeria in terms of providing valuable information on the issues and possible factors that can influence organizational learning. This study suggests that in the context of
development programs of raising the qualifications of teachers, there is a need for more support for professors (for example, salaries, grants), better working conditions in line with global standards in universities, and the competency assessment must be thorough as part of competency management processes.

Key words: competency management, organizational learning, University of Djelfa.

Introduction. The success of today’s public institutions depends on knowledge workers (Sutherland & Jordaan, 2004; Joo, 2010; Melhem, 2018; Turi et al., 2019). Survival and continuity of organizations depend on their capacity to achieve sustainable learning and performance development through adaptation and acceptance of changes within their institutions (Hussein et al., 2014).

Universities as institutions of learning, hold a significant role in shaping societies by developing human capital and knowledge, as well as creating and sharing knowledge that can be applied by other organizations (Dakyen, 2017).

The use of competency management (CM) allows organizations to align their human resources planning with business planning by evaluating the current competencies of their workforce and comparing them to the competencies necessary to realize the organization’s vision and business objectives. This integration helps organizations to effectively manage their human resources and optimize their workforce to achieve their goals (Purushotham Naik et al., 2013). Therefore this can be used this programs as a vehicle for the development and implementation of educational programs (Orces et al., 2005).

Development of the “organizational learning and organization is one of the key aspects developed through HRM” (Hussein et al., 2016). To tackle organizational challenges, it is crucial to foster learning and creativity in order to enhance resources, skills, and knowledge within business organizations. This helps sustain the university’s performance and reputation over time (Antunes & Pinheiro, 2020). Moreover Organizational learning has become an essential concept and mechanism for employee training, but it is still unclear how to develop suitable mechanisms for implementing collective learning (Fang & Chen, 2016).

Reviewing of the prior literature on competency management it is strongly evident a positive relationship between competency management and organizational learning (e.g. Giesecke & McNeil, 1999; Miguel et al., 2018). There is limited research that indicates empirical evidence of a positive relationship between CM and OL. The literature on competency management shows a variety of approaches to develop competencies. Competency management supports knowledge sharing knowledge and organizational creativity, performance, adaptability to external changes (Koh et al., 2015; Lustri et al., 2007), however, most of the previous studies do not take into account processes CM methodically.

Saadat & Saadat (2016) define organizational learning as the process of acquiring, distributing, integrating, and creating information and knowledge within an organization. This can be achieved by promoting creativity and providing a space for the sharing of ideas and knowledge (Dasgupta & Gupta, 2009). It is noteworthy to
mention that learning-oriented organization are more innovative (Alegre & Chiva, 2008; Tohidi & Maryam, 2012) through the introduction of new products, services, or processes (Werlang & Rossetto, 2019). Learning organization culture is considered crucial in facilitating educators to share relevant information with the appropriate individuals, in the proper place, and at the suitable time (Hussein et al., 2016). According to Alas & Vadi (2006) organizational learning without individual learning does not occur. However, individual learning does not guarantee organizational learning.

The unpredictable and uncertain environment, of the current business, combined with globalization, presents significant challenges. Therefore, successful management in this context requires the implementation of competency management as a crucial mechanism (Suikki et al., 2006). Globalization has a significant impact on human resource management in developing countries, particularly in Africa. It has resulted in the homogenization and convergence of business strategies, structures, and processes, as well as customer preferences (Mzee et al., 2010). Organizational learning enhances organization’s ability to organizational change and responds to varied business scenarios (Bess et al., 2011). Furthermore, organizational learning capacity improves innovative performance positively through creating new knowledge (Çömlek et al., 2012; Werlang & Rossetto, 2019).

The overall research questions guiding the study are:

(1) How do professors feel about competency management?
(2) How do professors feel about organizational learning?
(3) What is the relationship between competency management and organizational learning?
(4) What is the effect of competency management and organizational learning?

The objective of the study in this paper is to analyze factors that process CM and OL. The study is an analysis of the relationships and influence between competency management and organizational learning in two colleges in University of Djelfa.

This paper explores assessing the potential application of competency management in which improve organizational learning. Studying the competency management of higher education institutions as a source of organizational learning of professors is worth examining because the education system should create chances and opportunities to develop effective competency management. Such competencies enabling them for learning and creativity of higher education institutions. The modern trend of the world sees competency management as the main resource, that determines and develops sustainable performance at the country, region or organization level.

Review of literature. Competency management. Competencies is the heart of an organization’s management and have become the essence of high performance being a need more in today’s conditions (Fallis, 2013). Bontis et al (1999) According to Fallis (2013), competences are innate characteristics that lead to exceptional job performance. Individual competencies that are aligned with job demands and the organizational environment result in a model of effective performance. Fallis also
mentions how skills help managers and those in charge of staff development recognize what is required to achieve higher levels of excellence and performance. Competencies serve to improve overall performance by developing a shared framework of abilities, knowledge, and attitudes necessary to successful business practice.

The concept of competency management is a set of skills and techniques that enable organizations to provide the best services and products to customers and enhance the competitiveness of sustainability (Kak & Sushil, 2002). CM as a dynamic process aims for continuous development of the competencies, to improve the performance (Hartikainen, 2016).

Competency-Based Management (CBM) is a management approach that helps organizations achieve their strategic goals by linking the necessary competencies to the desired behaviors that lead to business success. In other words, CBM can effectively translate a company’s strategic vision into the behaviors that are necessary to achieve the desired business outcomes (Prasanthi, 2015). Professional competence is “personal and external”. Aptitude is the ability of an individual to mobilize their resources: (Miloud & Samah, 2012):

- personal resource (knowledge, skills, type of logic skills);
- external resources (databases, documents, colleagues, experts, various professions) to solve problems in a particular professional environment to meet organizational requirements.

Resource-Based View (RBV) by Successful organizations includes thinking invest of distinctive and core competencies (Eden & Ackermann, 2010) through the coordination, integration, and harmonization of diverse skills competencies portfolios (Nahla & Bouchetara, 2019).

Competencies are defined as talents, skills, knowledge, motivations, or observable attributes stated in terms of behaviors required for successful work performance (Purushotham Naik et al., 2013). CM is used to promote cultural change, strengthen HR development, minimize turnover, explain managerial and specialist positions, enhance attention on business goals, assist with planning careers and successions, analyzing talent, identifying existing and future weaknesses (Tripathi & Agrawal, 2014). “We see the concept of competencies is intertwined with the process of education, with competence seen as the acquisition of knowledge and the use of that knowledge to perform tasks or create tangible objects. In other words, competence is the practical application of knowledge. This perspective on learning is consistent with the constructivist approach, which emphasizes the active participation of learners in the learning process” (Sánchez et al., 2006). According to Prahalad & Hamel (1990), core competencies are collective learning in the organization, including how to coordinate diverse production skills and integrate multiple technology streams that is competencies tree. Consider a diverse corporation to be a tree, with the trunk and large limbs representing core items, smaller branches representing business units, and leaves and fruit representing final products. The root system nourishes and stabilizes everything: basic competencies that nourish and bring professional growth,
In regards to evaluating the competencies of students and faculty members, it is important to note that their acquired methodological and professional knowledge cannot be directly tested. Rather, their abilities to apply such knowledge in practical situations, or their performance, can be assessed (Bäcker et al., 2011). Miguel et al. (2018) conducted a study on learners’ and professors’ perspectives of existing competence evaluation procedures and their impact on learning quality. These findings show that, while current evaluation procedures do influence learning skills, there are considerable perceptual discrepancies between professors and students. Instructors have a poor perspective of its impact, arguing that it merely allows them to pass subjects. Students, on the other hand, agree that assessment has a good impact on their learning and provides possibilities for improvement.

In the literature, several models have been proposed to explain competency management functions are as follows:

- recruitment of competencies: human resource managers must spend their limited capital wisely. Organizations used to employ people who could do a certain set of tasks, especially on technical skills. Traditional job-based hiring and development strategies are less adaptable than competency-based hiring and development strategies, Organizations are recreating themselves in rapidly evolving market environments (Rodriguez et al., 2002). However, the process of competency-based selection requires the establishment of a recruitment database that contains information on competencies acquired by applicants. This involves maintaining records that match the competencies possessed by individuals to the requirements of the position in question, with the aim of achieving successful results (Palaniappan, 2003);

- training and development: skills gap analysis can identify the skills needed, the possibility of linking skills with equivalent learning objects (Draganidis & Mentzas, 2006). Using a skills-based learning program that allows employees to follow details such as the skills and competencies required for different roles and their performance (Tripathi & Agrawal, 2014);

- compensation management: employee competencies are not come out of anywhere, the basic concept of human resource management a specific approach needs strategies for handling its employees that are distinct from those used by other organizations (Díaz-Fernández et al., 2013);

- assessing competencies: Mohan (2019) explains that Performance management programs are designed to offer employees feedback on their job performance. These programs typically include a set of goals and criteria for measuring the extent to which these goals have been met. Effective performance management involves achieving desired results in a manner consistent with organizational expectations. The integration of competencies into the performance management process helps provide employees with feedback not only on what they have accomplished but also on how the work was performed, utilizing competencies to provide this feedback. Assessing competencies as part of performance management is a critical way to help employees understand
performance expectations and improve their competencies.

Therefore, the integration of competencies into all HRM processes is crucial and should begin with the training process. This should be followed by linking evaluation, hiring, and career development to competency systems. Positive results were observed in initial skills based training and assessment experiences (Vakola et al., 2007).

According to Khoshouei et al. (2013), managerial competences in a cultural context are made up of key competencies such as value, analysis, decision-making, adaptation, performance, leadership, knowledge and communication.

Organizational learning. In the 1970s, the notion of organizational learning developed, initially defined as the process of recognizing and correcting errors (Serinkan et al., 2014).

Despite diverse researches multidisciplinary, has not a unified agreement on the concept (Saadat & Saadat, 2016). Bratianu (2015) explains OL as a process designed and sustained with inspired leadership that occurs across the organizational, group and individual, levels through intuiting, institutionalizing, interpreting, and integrating. Brenda (2011) defines OL as internal social learning that occurs through the transfer of information from an organizational member or group of members to another group or group.

However, the focus of recent research has been on learning organization a learning climate, learning organizations need an organizational climate that facilitates the learning of the individuals (for example, it provides time and space for learning) but does not control the learning. It seems that organizations that are capable of learning quickly perform better in a dynamic industry (Kohtamäki et al., 2012).

Lavoisier (2015) notes that there are many ways in which employees acquire skills. This may be “innate” or acquired through organizational memory and by moving from one organization to another and learning from it and learning through the accumulation of experiences or experiences in the field of work. Roux-Dufort & Metais (1999) organizational learning helps with the development of a collection of knowledge assets that are embedded in the organization (core competencies).

According to Bratianu (2015), organizational learning is a multi-level process that includes the acquisition, interpretation, integration, and institutionalization of information at the individual, group, and organizational levels.

The levels of OL in organizations are as follows:
- individual level learning: involves acquiring new information and ideas from the environment, interpreting and experimenting with them, and modifying behavior based on the results (Odor, 2018);
- group level learning: team learning is crucial because it is considered as the fundamental unit of learning at the group level (Giesecke & Mcneil, 2004), it is through represents the translation of common concepts into new products, processes, procedures, structures, and strategies. By achieving strategic alignment, organizations need the ability to renew strategic sense that leads to sustainable competitive advantage (Bontis et al., 2002);
organizational level learning: at the organizational level, individual and group learning are incorporated into the organization’s non-human components, such as its systems, structures, processes, and strategies (Bontis et al., 2002).

Every company learns through adapting to changes in the work environment. Nonetheless, some businesses adapt more quickly and effectively than others. These firms see learning as an integral element of their daily operations need to create an educational environment where everyone becomes interested in learning and improving their knowledge of work. Transformation into an educational organization can help facilitate significant organizational change and thus maintain a sustainable competitive advantage (Dirani, 2006).

Moreover, transforms inputs of organizational learning, identified values of society and industry, goods and technology, and human and capital resources, these inputs are transformed into outputs, such as flexibility, adaptation, increased capital, and improved performance. Individual and team learning (Tanyovalaksna & Li, 2013).

Given the strategic role of organizational learning in establishing competency management and promoting the organization’s main goals, Saadat and Saadat (2016) argue that learning is not only enhancing employees’ knowledge and skills, but also developing and growing the organization and building a flexible dynamic learning organization.

This leads to proposing the following hypotheses:

H₁. There is a positive of the professors’ perceptions for competency management.
H₂. There is a positive of the professors’ perceptions for organizational learning.
H₃. There is a positive relation between competency management and organizational learning.
H₄. There is the effect of competency management and organizational learning.

Figure 1 shows the conceptual framework for the current study.

![Conceptual framework](image-url)

**Figure 1. Conceptual framework**

*Source: developed by the authors based on the data available.*

**Materials and methods.** The method of this study is a survey. Simple random sampling was used and the sample size was estimated at 113 professors of University of Djelfa in the academic year of 2021–2022. The study included two colleges: A –
Faculty of economics, business and management sciences of people (N = 226; n = 50) and B – Faculty of science and technology of people (N = 200; n = 63). Based on the literature and research in this area (Table 1), key indicators of the competency management is measured by four variables: recruitment of competencies, development of competencies, compensation of competencies, assessment of competencies; the organizational learning is measured by three variables individual level learning, organizational level learning, group level learning adopted a study questionnaire from (Bontis et al., 2002) organizational learning.

### Variables with the previous studies

<table>
<thead>
<tr>
<th>Variables</th>
<th>Items</th>
<th>Abbreviation</th>
<th>Literature support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competency management</td>
<td>Recruitment of competencies</td>
<td>RC</td>
<td>Vakola et al., 2007</td>
</tr>
<tr>
<td></td>
<td>Development of competencies</td>
<td>DC</td>
<td>Mulder &amp; Collins, 2007</td>
</tr>
<tr>
<td></td>
<td>Compensation management</td>
<td>CM</td>
<td>Díaz-Fernández et al., 2013</td>
</tr>
<tr>
<td></td>
<td>Assessment of competencies</td>
<td>CA</td>
<td>Miguel et al., 2018</td>
</tr>
<tr>
<td>Organizational learning</td>
<td>Individual level learning</td>
<td>ILL</td>
<td>Tanyaovalaksna &amp; Li, 2013</td>
</tr>
<tr>
<td></td>
<td>Group level learning</td>
<td>GLL</td>
<td>Simons et al., 2003</td>
</tr>
<tr>
<td></td>
<td>Organization level learning</td>
<td>OLL</td>
<td>Bontis et al., 2002</td>
</tr>
</tbody>
</table>

*Source:* developed by the authors based on the previous studies.

Aspects of the SPSS were used to do quantitative analysis (SPSS. 26). It includes descriptive statistics, frequency analysis, simple regression, multiple regression. A questionnaire was created, and its face and content validity were assessed in order to meet the study’s goals. The responses were graded on a five-point Likert scale ranging from (strongly disagree to strongly agree).

The score intervals obtained from the items have been graded as follows: “Very low” between {0.1-1.8}; “low” between {1.8-2.6}; “moderate” between {2.6-3.4}; “high” between {3.4-4.2} and “very high” between {4.2-5}.

#### 1.1. Reliability

The statistical analysis of the data was performed using SPSS and the Cronbach Alpha results are presented as follows (Table 2).

### Cronbach’s Alpha for the scales

<table>
<thead>
<tr>
<th>Variables</th>
<th>Indicators</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competency management</td>
<td>RC</td>
<td>0.63</td>
</tr>
<tr>
<td></td>
<td>DC</td>
<td>0.88</td>
</tr>
<tr>
<td></td>
<td>CM</td>
<td>0.82</td>
</tr>
<tr>
<td></td>
<td>CA</td>
<td>0.80</td>
</tr>
<tr>
<td>Organizational learning</td>
<td>ILL</td>
<td>0.87</td>
</tr>
<tr>
<td></td>
<td>GLL</td>
<td>0.70</td>
</tr>
<tr>
<td></td>
<td>OLL</td>
<td>0.78</td>
</tr>
<tr>
<td>Overall</td>
<td></td>
<td>0.95</td>
</tr>
</tbody>
</table>

*Source:* developed by the authors.

Table 2 demonstrates that the Cronbach’s Alpha value is 0.95, indicating a high level of internal consistency for the research questionnaire. This result aligns with Sarr and Ba’s (2017) findings, stating that values greater than 0.70 for the Cronbach coefficient are acceptable, indicating the consistency, reliability, and eligibility of the
study tool for statistical analysis. Therefore, the values presented in the table suggest that the research tool is stable, its paragraphs are consistent, and it is reliable for statistical analysis.

The information presented in the Table 3 reveals that 89% of the respondents were males while only 10% were females. The largest age group was the (30–39) year-old group, accounting for 60% of the total, and the smallest percentage was from the under 30 group. The highest percentage of educational level attained was a university diploma, with a share of 52%. The most significant percentage of respondents fell under the category of 6–10 years of experience, accounting for 53%. Regarding job positions, College B had the largest percentage of respondents at 55%.

Table 3

<table>
<thead>
<tr>
<th>Demographic variables</th>
<th>Classification</th>
<th>Frequency, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>101(0.89)</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>12(0.10)</td>
</tr>
<tr>
<td>Age</td>
<td>Under 30</td>
<td>11(0.09)</td>
</tr>
<tr>
<td></td>
<td>30–39 years</td>
<td>60(0.53)</td>
</tr>
<tr>
<td></td>
<td>40–49 years</td>
<td>15(0.13)</td>
</tr>
<tr>
<td></td>
<td>50 over</td>
<td>27(0.23)</td>
</tr>
<tr>
<td>Education</td>
<td>Master</td>
<td>36(0.31)</td>
</tr>
<tr>
<td></td>
<td>Doctorate</td>
<td>33(0.29)</td>
</tr>
<tr>
<td></td>
<td>University diploma</td>
<td>44(0.36)</td>
</tr>
<tr>
<td>Experience</td>
<td>From 5 years or less</td>
<td>18(0.15)</td>
</tr>
<tr>
<td></td>
<td>From 6–10 years</td>
<td>53(0.46)</td>
</tr>
<tr>
<td></td>
<td>From 11–15 years</td>
<td>20(0.17)</td>
</tr>
<tr>
<td></td>
<td>15 years or more</td>
<td>22(0.19)</td>
</tr>
<tr>
<td>Job description</td>
<td>Professor</td>
<td>20(0.17)</td>
</tr>
<tr>
<td></td>
<td>Lecturer: A</td>
<td>29(0.25)</td>
</tr>
<tr>
<td></td>
<td>Lecturer: B</td>
<td>16(0.14)</td>
</tr>
<tr>
<td></td>
<td>Assistant master: A</td>
<td>26(0.23)</td>
</tr>
<tr>
<td></td>
<td>Assistant master: B</td>
<td>22(0.19)</td>
</tr>
<tr>
<td>College</td>
<td>College A</td>
<td>50(0.44)</td>
</tr>
<tr>
<td></td>
<td>College B</td>
<td>63(0.55)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100 %</td>
</tr>
</tbody>
</table>

Notes. A: Faculty of economics, business and management sciences.
B: Faculty of science and technology.
Source: developed by the authors.

Results and discussion. The study sample responses’ computed averages and standard deviations for competency management are as follows (Table 4). It is clear from Table 4 that competency management in terms of relative importance came average if the arithmetic average was (3.04) and a standard deviation (0.68). As well as the table showed that after the Recruitment of competencies came in first place with an average of (3.19) and with a standard deviation of (0.64) and with medium relative importance, while after assessment of competencies came in the last place with a
mathematical average of (2.84) and a standard deviation (0.68) and with medium relative importance.

**Table 4**

### Computational averages and standard deviations of dimensions of competency management

<table>
<thead>
<tr>
<th>Domain</th>
<th>Mean</th>
<th>S.D.</th>
<th>Level</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recruitment of competencies</td>
<td>3.19</td>
<td>0.64</td>
<td>Medium</td>
<td>1</td>
</tr>
<tr>
<td>Development of competencies</td>
<td>3.05</td>
<td>0.89</td>
<td>Medium</td>
<td>2</td>
</tr>
<tr>
<td>Compensation management</td>
<td>3.04</td>
<td>0.81</td>
<td>Medium</td>
<td>3</td>
</tr>
<tr>
<td>Assessment of competencies</td>
<td>2.84</td>
<td>0.84</td>
<td>Medium</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>3.04</td>
<td>0.68</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*Source*: developed by the authors.

Table 5 reveals that learning organization had a medium level of relative importance, with an arithmetic average of (3.22) and a standard deviation of (0.69). The table indicates that organizational level learning had the highest relative importance with an average of (3.41) and a standard deviation of (0.65), while individual level learning was ranked last with a mathematical average of (3.05) and a standard deviation of (0.88), with medium relative importance.

**Table 5**

### Computational averages and standard deviations of organizational learning

<table>
<thead>
<tr>
<th>Domain</th>
<th>Mean</th>
<th>S.D.</th>
<th>Level</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual level learning</td>
<td>3.05</td>
<td>0.88</td>
<td>Medium</td>
<td>3</td>
</tr>
<tr>
<td>Group level learning</td>
<td>3.20</td>
<td>0.77</td>
<td>Medium</td>
<td>2</td>
</tr>
<tr>
<td>Organization level learning</td>
<td>3.41</td>
<td>0.65</td>
<td>High</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>3.22</td>
<td>0.69</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*Source*: developed by the authors.

Table 6 shows that Pearson correlation coefficients to investigate all correlations among the dimensions of process CM with OL are significant relationships for faculty members in the University of Djelfa (R = 0.780; p < 0.01), these findings support Hypothesis 3a.

**Table 6**

### Correlation matrix

<table>
<thead>
<tr>
<th>Domain</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recruitment of competencies</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development of competencies</td>
<td>0.676</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compensation management</td>
<td>0.597</td>
<td>0.708</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment of competencies</td>
<td>0.614</td>
<td>0.729</td>
<td>0.810</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competency management</td>
<td>0.818</td>
<td>0.903</td>
<td>0.887</td>
<td>0.890</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual level learning</td>
<td>0.631</td>
<td>0.697</td>
<td>0.628</td>
<td>0.618</td>
<td>0.737</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 6

<table>
<thead>
<tr>
<th>Domain</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group level learning</td>
<td>0.561</td>
<td>0.622</td>
<td>0.489</td>
<td>0.475</td>
<td>0.621</td>
<td>0.736</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organization level learning</td>
<td>0.706</td>
<td>0.666</td>
<td>0.554</td>
<td>0.624</td>
<td>0.729</td>
<td>0.739</td>
<td>0.643</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational learning</td>
<td>0.708</td>
<td>0.740</td>
<td>0.627</td>
<td>0.644</td>
<td>0.780</td>
<td>0.932</td>
<td>0.867</td>
<td>0.889</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0.815</td>
<td>0.878</td>
<td>0.814</td>
<td>0.825</td>
<td>0.954</td>
<td>0.873</td>
<td>0.776</td>
<td>0.849</td>
<td>0.932</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Notes. Correlation is significant at the 0.01 level.
1 = recruitment of competencies; 2 = development of competencies; 3 = compensation management; 4 = assessment of competencies; 5 = competency management; 6 = individual level learning; 7 = group level learning; 8 = organization level learning; 9 = organizational learning.
Source: developed by the authors.

Based on the results in Table 7, it is evident that no problems of multicollinearity exist between the independent variables as it could be seen all variables of CM and OL produced VIF values smaller than 10. According to Petter et al. (2007) that VIF should be within less than 3.3, yet most common use applies the limit to 10 (Mela & Kopalle, 2002), and tolerance values greater than 0.1 (Kettinger & Lee, 2005). Therefore, analysis in this study do not of multicollinearity.

Table 7

<table>
<thead>
<tr>
<th>Variables</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recruitment of competencies</td>
<td>0.506</td>
<td>2.020</td>
</tr>
<tr>
<td>Development of competencies</td>
<td>0.365</td>
<td>1.736</td>
</tr>
<tr>
<td>Compensation management</td>
<td>0.310</td>
<td>3.221</td>
</tr>
<tr>
<td>Assessment of competencies</td>
<td>0.290</td>
<td>3.453</td>
</tr>
</tbody>
</table>

Note. Dependent variable: organizational learning.
Source: developed by the authors.

Table 8 shows the results of an ANOVA test, which indicates that the overall regression model is significant with an F value of 98.148 and a significance level of less than 0.000. These results support Hypothesis 4a.

Table 8

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Squares</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>34.183</td>
<td>4</td>
<td>8.546</td>
<td>47.287</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>19.518</td>
<td>108</td>
<td>0.181</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>53.701</td>
<td>112</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. A significance level of (0.05).
Source: developed by the authors.

The information in Table 9 indicates that the independent variable “degree of competences management” can account for 63.7% of the variation in the dependent variable “organizational learning”, as indicated by the R significant value of 0.798 and the R square value of 0.637.
Multiple linear regression (MLR) results of effect of competency management on organizational learning (N = 113)

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>β</th>
<th>t</th>
<th>R</th>
<th>R Square</th>
<th>Ssig(T)</th>
<th>F</th>
<th>Sig(F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.711</td>
<td>5.065</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recruitment of competencies</td>
<td>0.375</td>
<td>0.088</td>
<td>0.798</td>
<td>0.637</td>
<td>0.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development of competencies</td>
<td>0.301</td>
<td>0.740</td>
<td></td>
<td></td>
<td></td>
<td>98.148</td>
<td>0.000</td>
</tr>
<tr>
<td>Compensation management</td>
<td>0.062</td>
<td>0.089</td>
<td></td>
<td></td>
<td></td>
<td>0.486</td>
<td></td>
</tr>
<tr>
<td>Assessment of competencies</td>
<td>0.073</td>
<td>0.089</td>
<td></td>
<td></td>
<td></td>
<td>0.414</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Dependent variable: organizational learning.

*Source:* developed by the authors.

The respondents’ responses were directed towards agreement on the availability of competency management with its dimensions among the employees in an average way, and this result is consistent with the result (Vakola et al., 2007; Velayudhan, 2011). Respondents’ responses tended toward agreement on the availability of the dimensions of organizational learning to a medium degree, these findings are consistent with the result (Canessa-Terrazas et al., 2017; Flöthmann et al., 2018).

The findings of this study offer interesting insights into the universities, we find a positive relationship between competency management and organizational learning, the result is corroborating previous studies (Giesecke & McNeil, 1999).

Results of the second hypothesis which has been shown that all of the practices of competency management have a direct positive effect on organizational learning. These results are in agreement with the results of researches (Gonçalves et al., 2016; Saha et al., 2016).

Competency management seems to positively affect organizational learning. However, some employees in a learning organization may be unable to learn (in the sense of generating knowledge) (Fenwick, 1996). Competency management does not exist in the absence of people. The heart of CM is understanding how people learn and develop information. Understanding learning at the individual level differs from establishing or rating organizational competencies. As a psychological being, an individual creates learning based on his or her point of view. This raises issues that may not be easily resolved (Hartikainen, 2016).

The results indicate that further study of the issue is still required about competency management. Several other questions remain to be addressed in building a competency management model for instance retaining competencies (Holland et al., 2007), planning the career path (Antoniui, 2010), sustainable organizational performance (Aina & Atan, 2020), knowledge acquisition (Ma & Huang, 2016), crisis management (Roux-Dufort & Metais, 1999). In addition, further research on organizational learning in educational institutions desirable to extend our knowledge,
includes a study of theories of different dimensions (e.g., Argyris & Schön, 1997; Huber, 1996; Senge, 1990).

**Conclusions.** The findings of this study offer interesting insights into the universities, we find a positive relationship between competency management and organizational learning, and shown that all of the practices of competency management (recruitment of competencies, development of competencies, compensation of competencies, assessing of competencies) have a direct positive effect on organizational learning for faculty members in two colleges in University of Djelfa. Scientific novelty of the study lies in the clarification of promising directions for the development of the practices of competencies management (recruitment of competencies, development of competencies, compensation of competencies, assessing of competencies) and their effect on organizational learning of faculty members. This study will be of tremendous importance of the faculty members in two colleges in University of Djelfa.

**Practical implications and limitations.** The paper presents several solutions to the practical implications already that can be discussed, as a result, the perceived explore practices of competency management to improve the organizational learning. Universities supply knowledge for professors’ various academic disciplines. In the context of development programs of raising the qualifications of professors, necessary more support for professors (for example, salaries, grants), improve working conditions according to worldwide standards in universities assessment of competencies must be thorough as part of competency management processes. If we don’t do this, the success of CM efforts will be in doubt.

The study has identified some limitations. The generalizability of the findings is limited as the sample size is small, and the results may not be applicable to other cases, perhaps given the timeframe, the study can encompass further factors such as economic challenges, occupations, and countries, cultures.

**References**


