

Informal Learning and its Moderating Effect Between Employability and job performance of Young Recent Graduates in Their First job

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Abstract: The purpose of this paper is to examine the effects of knowledge management through informal learning on the relationship between employability and job performance of recent graduates in their first jobs. A quantitative, cross-sectional survey of 392 graduates of business school management programs at 4 universities in Lima, Peru was conducted to study the relationship between employability and job performance as moderated by informal learning inside and outside the work environment. It is confirmed that informal learning positively moderates the relationship between employability and job performance of recent graduates. However, informal learning impacts the employability dimensions differently. The results challenge traditional methods of learning and training inside and outside the work environment and provide new insights for knowledge management, talent management and their induction, training and development programs for a dynamic workforce with digital skills developed since the university stage. The implications of limiting employees' access to informal learning activities may limit future employability and job performance; employees can develop knowledge and competencies through informal learning activities on their own initiative, however, it is important to facilitate this process within the organization's processes. This study provides further evidence of the relationships between employability, informal learning and job performance in young recent graduates. In addition, it provides knowledge on how business schools can include informal or non-instructional learning activities in their curricula, thus generating self-learning skills for upcoming graduates and improving their skills and competencies.

Keywords: Knowledge Management, Informal Learning, Employability, job Performance, Recent Graduate, First job.

1. Introduction

Currently, the increase in local competition, the globalization process and the constant changes in the field of management, have highlighted the need to emphasize the importance of investing in the development of employees' skills to ensure the survival of organizations and achieve business sustainability. In this sense, it confirms the importance of human resources development to ensure the development of employees' skills and prepare them for the current operational, commercial and administrative requirements that the environment demands. Likewise, it is important that the development of these skills be generated from a university preparation stage and thus establish a transition from university to the most productive career for all stakeholders. It is stated that learning as a means for personnel development leads to this achievement by promoting the Employability (EMP) of the collaborator and his performance in the workplace (Dunphy et al., 1997). Kolb (1984) defines learning as a process in which knowledge is generated through the transformation of experiences through a cyclical process involving experience, observation, conceptualization and experimentation. The theory emphasizes the central role of experience in learning. This cycle is continuous, and individuals can enter it at any stage. The theory also suggests that individuals have different learning styles based on their preferences for these stages, known as divergent, assimilative, convergent and accommodative.

Learning can have a place both inside and outside an organization and offers the possibility of improving Job Performance (JOB). It is stated that the ability to learn is one of the fundamental attributes of human beings and involves them in their development. Much of this development is informal, occasional, sporadic and in some cases random. Learning on the job can occur in several different ways, not just formally (Leslie et al., 1998).

As business becomes faster and faster and the rate of innovation accelerates, employees feel a certain degree of pressure to be competitive within their organization as well as in the labor market by seeking to improve their skills and competencies to develop their EMP levels and improve their JOB. EMP is based on a broad range of competencies, EMP is also defined as the continuous fulfillment, acquisition or creation of work through the optimal use of competencies, in other words, the possession of certain competencies should enable employees to obtain, retain or create work for themselves (Brockner et al., 2006). Collaborators who perceive themselves as highly employable feel less threatened by the environment, experience less stress and improve their JOB (Gerken et al., 2015). In that sense, recent graduates by developing employability competencies can develop attitudes of adaptability towards new work experiences and thus be more prepared to an increasingly demanding and competitive work dynamic. To address this dynamic, the concept of EMP has generated great interest in talent management departments and in the academic environment, the same interest has been received by studies that analyze the development of skills and competencies of employees through effective

and novel learning processes (Kyndt et al., 2009).

For the moment the debate has concluded that the traditional methods of training in the work environment should be questioned, and further research should be done on the importance of using competence development strategies that are based on an integration of Formal Learning (FL) and Informal Learning (IL) as determining tools in knowledge management (Kock and Ellström, 2011). Underestimating IL can undermine the spontaneous nature of learning, claims that one type of learning is better or worse than the other should be avoided, both types of learning can be applied in organizations, both have advantages (Malcolm et al., 2003). IL is fundamental in the performance of collaborators in organizations, but it is not a replacement for FL or institutional education; although FL is more productive if it is designed and planned, the need for organizations to have informal information that increases learning based on experience is evident (Marsick and Watkins, 2016). It is stated that much of the knowledge and learning that occurs in organizations is accidental and informal, this characteristic does not contribute to the sustainability of these companies in the medium and long term; based on this context it is proposed to use knowledge-based learning methods that give an IL structure for the benefit of companies (O'Brien et al., 2019).

Just as various types of learning influence performance, it is also argued that learning is essential for improving EMP. There is sufficient evidence finding several positive outcomes of learning on employees' EMP, such as confidence, openness to change, and competitiveness (Crouse et al., 2011). Van der Klink et al. (2014) have studied the effects of education and training on EMP among employees and found positive effects. Van Der Heijden et al. (2009) affirms the positive effect between IL and EMP of employees. Similarly, Lecat et al. (2018) report positive relationships between IL and occupational specialization and optimization. These findings confirm the relationship between IL and its positive influence with EMP.

Recent studies have analyzed the relationship between EMP, JOB and IL, finding a strong relationship between the variables; however, no research has addressed the moderating relationship of IL between EMP and JOB of young recent business school graduates in their first work experience.

The research questions are:

- Is IL a suitable knowledge management method to foster the EMP of newly graduated employees?
- What are the most appropriate learning methods to improve the JOB of newly graduated employees in their first work experience?
- Are there learning methods that intervene positively or negatively in the relationship of EMP and JOB?

2. Literature Review

Formal training programs cannot adequately prepare employees for all possible scenarios and are usually not designed to equip people for continuous learning on the job; employees need to acquire new knowledge and skills continuously through informal programs as non-curricular means (Tannenbaum and Cerasoli, 2013). In Sambrook's (2005) research, it is suggested that for the achievement of JOB, the use of both FL and or IL should be encouraged, in other words, both forms of learning should be integrated to maximize the benefits of employee development. Individual learning in the workplace takes place through the dynamic interaction between FL and IL, so it may be difficult to conceive of either form being successful without adding another form of component. In the same vein, employee learning has a profound impact on the success of modern organizations. Well-designed, timely, and novel formal and non-formal training programs can drive JOB (Cerasoli et al., 2018). Staff development was found to have an indirect effect on JOB through informal methods learning. Moreover, the indirect effect of staff development on JOB through IL became stronger in small and medium-sized firms. (Choi and Jacobs, 2009). It is confirmed that IL as a process within staff development practice positively impacts on JOB. It can be concluded that learning strategy is key to JOB, and that IL is of particular importance (Lejeune et al., 2021).

EMP skills encompass a range of competencies that are crucial for individuals to succeed in the labor market. Although formal education has traditionally been considered the primary means of acquiring these competencies, there is growing recognition of the importance of IL in enhancing EMP (Bates et al., 2004). IL, which takes place outside of traditional educational settings, plays an important role in the development of personal and professional competencies that can improve an individual's confidence and overall EMP (Bates et al., 2004). Research suggests that EMP competencies are most effectively developed when they are integrated into the academic curricula of different disciplines, rather than being limited to stand-alone "EMP courses" (Wickramasinghe and Perera, 2010). This integration ensures that students are explicitly taught and

encouraged to cultivate these skills alongside their academic pursuits, thus enhancing their preparation for the labor market (Wickramasinghe and Perera, 2010). EMP skills encompass a wide range of competencies, such as teamwork, problem solving, adaptability, and resilience (Scott et al., 2017). Employers highly value communication and problem-solving skills, indicating the importance of these competencies in curriculum design to meet labor market needs. Furthermore, combining FL with feedback-seeking behaviors, a type of IL is particularly advantageous for developing the complex skills needed in the workplace (Elsen et al., 2022). While formal education remains essential for acquiring professional skills, IL complements formal training by fostering interpersonal skills, decision-making abilities, and problem-solving skills, which are in high demand by employers (Taute, 2014). The synergy between formal training and IL not only improves people's EMP, but also contributes to their continuous professional development (Taute, 2014). Therefore, the relationship between IL and EMP is increasingly recognized as a vital element in preparing individuals, by integrating EMP competencies into formal education, recognizing the value of IL experiences, and emphasizing the development of a diverse set of competencies, individuals can improve their EMP and stand out in today's competitive labor market.

Previous studies, although they have not empirically examined the relationship between IL, EMP and JOB, in recent business school graduates in their first jobs, have provided several findings suggesting a positive association between the variables. However, it is noteworthy that IL had a more significant impact compared to formal training; that is, the research results clearly demonstrate that IL activities play a crucial role in individual JOB than FL activities. Therefore, it can be concluded that IL is a key factor in improving job performance by developing relevant competencies. The studies by Froehlich et al. (2014) and Van Der Heijden et al. (2009) collectively suggest that both FL and informal are expected to have a positive impact on individual JOB. This study, like Froehlich et al. (2014), considers that employees are employable, have extensive technical knowledge about their field of work, are attentive to contextual changes and are resilient to the changes imposed on them. In this sense, only 3 of the 5 dimensions of the (Van der Heijde and Van der Heijden, 2006) model linked to the characteristics indicated above will be analyzed.

3. Theoretical Framework

3.1 Formal Learning and Informal Learning

The learning theory proposed by Marsick and Watkins (2016) points out 2 types of learning; the first one is the FL that is characterized by being a planned learning, certified and developed in courses provided in higher education institutions; and the second one the IL is the one that is learned in the daily activities at work, where the learning is given by the active participation of workers in the organization's projects, as well as the rotation of personnel within the organization. It has been known for some time that more learning occurs in the workplace than just what happens in formal training classrooms. Brockner et al. (2006) have identified the different forms of workplace learning as formal, informal and incidental. FL (training), of course, are discrete planned events (experiences) used to instruct people on how to perform specific defined jobs. It is usually institutionally sponsored and highly structured. IL can occur in institutions, but it is typically not classroom-based or highly structured, and control of the learning is in the hands of the learner, not determined by the organization. AF includes an expressed goal of the organization and a defined process.

Workplace learning occurs through a dynamic interaction between FL and IL. They feel that FL stimulates IL, and that IL often leads to engaging in more structured learning activities (Shipton et al., 2002). The two types of learning complement each other and lead to new improvements and innovations, workplace learning does not occur for its own sake, but to achieve organizational and individual goals. Organizational goals include increasing worker participation in decision making and expanded job responsibilities. Workplace learning is defined as a means of addressing employee development that is consequently designed to improve the likelihood of achieving individual and/or organizational performance, or as an individual process designed to achieve learning toward the attainment of personal and professional goals (Park et al., 2019).

3.2 Employability

The concept of EMP focuses on three areas: labor market outcomes, the individual's responsibility to develop and maintain transferable skills due to the increasing prevalence of inter-organizational careers (Hall, 2004), and the relativity of EMP in terms of both supply and demand in the labor market (Rothwell and Arnold, 2007). Based on extensive literature and empirical research, five employable employee competencies (or dimensions

of EMP), knowledge, work experience, anticipation and optimization, personal flexibility, corporate sense and balance, were identified (Van Der Heijden et al., 2009). EMP is conceptualized as a form of job-specific active adaptability that enables workers to identify and take advantage of career opportunities. Thus, EMP facilitates movement between jobs, both within and between organizations. Although EMP does not ensure actual employment, it improves the likelihood that an individual will obtain a job. An individual is employable to the extent that he or she can effectively leverage personal factors to negotiate environmental demands (Fugate et al., 2004).

3.3 Job Performance

For Tsui et al. (1997), the JOB is generated in four dimensions, from the employer's perspective, on the relationship between them and their subordinates. These become, firstly, the Quasi Spot Contract defined as the pure economic exchange, where the employer offers short-term economic incentives in exchange for specific contributions from the employee. Secondly, the Mutual Investment, which involves unspecified, broad obligations open to both parties, where the incentives offered by employers go beyond monetary rewards. Third, the Underinvestment type relationship, where in the employment relationship the employee is expected to assume broad and unlimited obligations while the employer reciprocates with specific, short-term monetary rewards with no commitment to any investment in the subordinate's training or career life. Finally, within the unbalanced approach is the overinvestment relationship, where the employee is characterized by performing only a specific set of work-focused activities while the employer offers open-ended and wide-ranging rewards that include benefits such as training and commitment to a lifetime of career opportunities.

On the other hand, the theory of Rich et al. (2010) defines the variable of JOB as that "additional value attached to a company from a set of behaviors or behaviors that an employee contributes both directly and indirectly to the objectives of the organization". In this study, the author conducted an analysis that supports the hypothesis that job engagement is related to perceived organizational support, value congruence and core self-evaluations, and the two dimensions of job development, which are task performance and organizational citizenship behavior. It is also mentioned that JOB does not only include task performance, but also includes behaviors that contribute to companies in a less direct way such as a favorable social and psychological environment for the performance of work involved to the core tasks. It has also been determined that JOB is made up of 3 components. The first is role behavior, the second is organizational citizenship behavior that benefits the organization, and the third is organizational citizenship behaviors that benefit the individual (Williams and Anderson, 1991).

In view of the above, this research work formulates the following hypotheses.

H1: EMP is positively and significantly associated with JOB.

H2: IL is positively and significantly associated with JOB.

H3: IL positively moderates the relationship between EMP and JOB.

4. Methodology

4.1 Sample Design

A cross-sectional quantitative survey was conducted among 392 graduates of business school management programs from 4 universities in Lima, Peru, to study the relationship between employability and job performance moderated by informal learning inside and outside the work environment. A quantitative methodology was applied where a structured questionnaire was used to collect responses from the subject of interest, which required between 8 to 10 minutes to complete. All respondents were informed of the objective of the research and the strictly academic purposes of the present investigation were confirmed. The characteristics of the cases surveyed are shown in Table 1. The first section of the research instrument included filter and control questions, in this section it was verified if the respondents were in their first work experience and if they were recent graduates. The following sections contained a section for the evaluation of the hypotheses of this article. The responses for the constructs were measured through Likert methodology, under a 5-point scale (1=strongly disagree, 5=strongly agree). The constructs measured were the following: Informal Learning (Froehlich et al., 2014), Employability (Van Der Heijden et al., 2009) and Job Performance (Williams and Anderson, 1991).

Table 1: Descriptive statistics

	Frequency	%
Number of employees per company		
Less than 10	218	55.6%
Between 11 to 20	46	11.7%
Between 21 to 50	128	32.7%
Company's Operating Time		
3 to 5 years	70	17.9%
5 to 10 years	167	42.6%
More than 10 years	155	39.5%
Genre		
Male	199	23.7%
Female	193	76.3%

4.2 Measures

In the context of this study, IL is operationally defined as respondents' subjective perception of the extent to which they actively participate in unstructured or spontaneous learning activities in their workplace, as well as the level of support provided by the organization to foster a culture conducive to learning at work. The study examined 4 dimensions of IL, including actively seeking information (IS), seeking feedback from both supervisors (SF) and colleagues (CF), as well as seeking help (HS) when needed (Froehlich et al., 2014). The measurement of the variable EMP focuses on a competency-based approach, emphasizing its advantages for both career and company outcomes (Van Der Heijden et al., 2009). EMP is considered a multidimensional concept with five correlated dimensions: (occupational expertise, anticipation and optimization, personal flexibility, corporate meaning and balance). For this research, priority is given to how employees themselves value their employability (Fugate et al., 2004). This is in line with previous studies, which suggest that perceived employability is more important than appraisal (equally subjective), since employees act on their own perceptions. Occupational experience (EXP), anticipation and optimization (ANT), and personal flexibility (FLEX) will be considered.

JOB refers to the perception that individuals have of their ability to fulfill the assigned tasks and responsibilities conferred on them by the employing organization. To assess and gauge the level of JOB, this research used the 3 dimensions of performance originally conceived by Williams and Anderson (1991), where 3 dimensions are identified as in-role behavior (IRB), organizational citizenship behavior that benefits the individual (OCBI) and organizational citizenship behavior that benefits the organization (OCBO).

5. Results

5.1 Validity and Reliability

The conceptual model (Figure 1) was tested using Smart PLS 4.0, a sophisticated and widely recognized software tool). To assess the efficacy and reliability of the model, a comprehensive evaluation was conducted, including measurement of item loadings, internal consistency, reliability, convergent validity, and discriminant validity. The detailed results of these evaluations are meticulously presented in Tables 2 and 3, providing an overview of the model's performance.

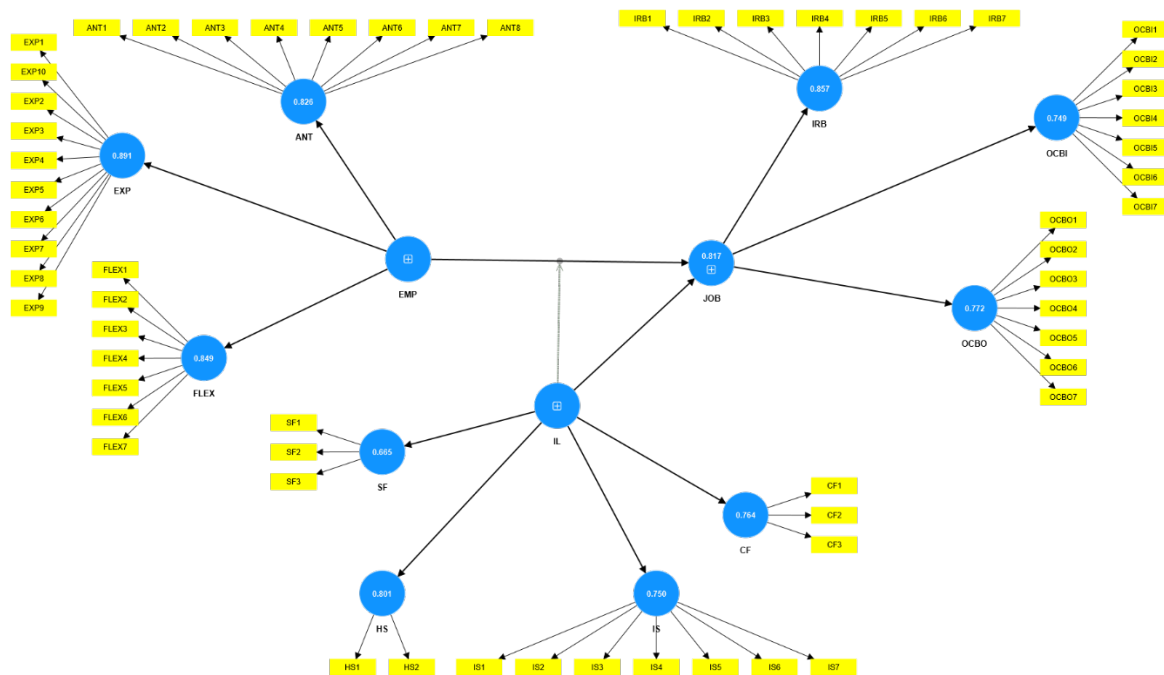


Figure 1: Structural Model

A crucial aspect that was examined during the evaluation was the loadings of the items used. It was observed that all item loadings exceeded the threshold of 0.50, which is considered statistically significant and indicative of convergent validity (Hair et al., 2014). This finding is highly relevant and reinforces the validity of the model, as it demonstrates that the constructs investigated accurately measure the intended concepts. This is a significant finding, as it provides further support for the robustness and reliability of the conceptual model.

Reliability was another important criterion assessed in this study and was evaluated using two widely accepted metrics: Cronbach's alpha and AVE composite reliability. The results of these assessments revealed that the model exhibits a high level of reliability. Specifically, an AVE value equal to or greater than 0.5 and a Cronbach's alpha indicator greater than 0.7 are considered indicative of an adequate model. In this case, all AVE values and Cronbach's alpha indicators exceeded these thresholds, which further reinforces the reliability and validity of the conceptual model investigated (Hair et al., 2014).

In addition to assessing the reliability and convergent validity of the model, an analysis was also performed to determine its discriminant validity. This analysis was intended to measure the differences between each construct and to assess whether they were distinct from each other. The results of the discriminant validity assessment were very encouraging, as they indicated that the square root of each AVE was greater than the correlations of the constructs. This result is significant, as it suggests that the constructs investigated measure unique and distinct concepts, which demonstrates the model's ability to discriminate between different constructs effectively (Hair et al., 2014). Overall, the results of this comprehensive evaluation strongly support the investigated conceptual model. The robustness and reliability of the model offers favorable results obtained in terms of convergent validity, reliability and discriminant validity.

Table 2: Measurement properties

Construct	Dimension	Cronbach's Alpha (>0.7)	AVE (>0.5)	CR (>0.7)
EMP	ANT	0.938	0.699	0.940
	EXP	0.960	0.734	0.960
	FLEX	0.927	0.697	0.929
IL	HS	0.855	0.874	0.857
	IS	0.894	0.613	0.903
	CF	0.935	0.884	0.935
	SF	0.942	0.896	0.942
JOB	IRB	0.946	0.758	0.948

Construct	Dimension	Cronbach's Alpha (>0.7)	AVE (>0.5)	CR (>0.7)
	OCBI	0.917	0.669	0.921
	OCBO	0.887	0.596	0.893

Note: Average variance extracted (AVE), composite reliability (CR).

Table 3: Discriminant validity Fornell - Larcker analysis

	ANT	CF	EXP	FLEX	HS	IRB	IS	OCBI	OCBO	SF
ANT	0.836									
CF	0.588	0.94								
EXP	0.784	0.62	0.857							
FLEX	0.753	0.621	0.815	0.835						
HS	0.594	0.699	0.69	0.719	0.935					
IRB	0.702	0.665	0.807	0.751	0.773	0.871				
IS	0.642	0.666	0.691	0.675	0.731	0.731	0.783			
OCBI	0.666	0.645	0.653	0.647	0.596	0.696	0.708	0.818		
OCBO	0.658	0.571	0.703	0.639	0.654	0.739	0.648	0.643	0.772	
SF	0.527	0.684	0.586	0.562	0.642	0.618	0.541	0.567	0.579	0.947

5.2 Structural Equation Model and Hypothesis Testing

The coefficient of determination was 0.817 (see Figure 1) for JOB, which indicates a substantial level of determination (Hair et al., 2012) generated by EMP and IL. That is, there are other determinants for JOB that will need to be the product of further research.

The first hypothesis, H1, indicates that EMP has a positive and significant effect on JOB. Table 4 indicates that a positive and significant effect can be traced between the variables ($\beta = 0.429$; T-value = 6.607 and $p = 0.000$). Therefore, H1 should be accepted. The second hypothesis, H2, indicates that IL has a positive and significant effect with JOB. Table 4 indicates that a positive and significant effect can be plotted between the variables ($\beta = 0.454$ T-value = 6.942 and $p = 0.000$). Therefore, H2 should be accepted. The third hypothesis, H3, indicates that IL has a positive and significant moderating effect with EMP and JOB. Table 4 indicates that a negative and significant effect can be traced between the variables ($\beta = -0.035$; T-value = 3.026 and $p = 0.002$). Therefore, H3 should be not accepted.

Variance inflation factors (VIF) were also calculated to detect multicollinearity between variables. VIFs greater than 10 indicate high and unacceptable levels of multicollinearity between constructs (Hair et al., 2014). The VIFs for the relationship between variable items ranged from 1.415 to 4.803, suggesting that the level of multicollinearity between these variables is acceptable.

Table 4: Hypothesis testing

	Coefficients	T-Value	p-Value	Hypothesis
EMP → JOB	0.429	6.607	0.000	H1 - Accepted
IL → JOB	0.454	6.942	0.000	H2 - Accepted
IL x EMP → JOB	-0.035	3.026	0.000	H3 – Not Accepted

5.3 Discussion

Driven by the increasing presence of demands for goal achievement, the competitiveness of local markets, the high rate of innovation, EMP, among other factors, put human resource managers on alert to develop efficient human talent management strategies to cope with all these demands of the labor market. Therefore, this research paper set out to investigate the effects of IL activities on the EMP and JOB of business school management program graduates in their first work experiences. Two general conclusions can be drawn from the results. First, the performance of learning activities generates EMP increases JOB; this relationship is driven by IL.

This study provides strong evidence supporting the thesis that IL play a crucial role in improving EMP and overall, JOB, which highlights the importance of continuous workplace learning and the development of employability competencies in business schools through IL. The relationship between IL, EMP and employee

JOB has been extensively studied in the literature. Research by Froehlich et al. (2014) highlights that IL contribute significantly to improving EMP, which in turn improves job performance. This conclusion is corroborated by Heijden et al. (2009), who highlight the importance of IL in increasing employee performance. In addition, Eldor and Harpaz (2015) discuss how learning climate influences performance behaviors, indicating a strong connection between learning environments and employee performance. In addition, Rowden's (2002) study confirms the dynamic interaction between IL in the workplace, further highlighting the importance of both types of learning in improving job satisfaction and, consequently, job performance. In addition, Raykov's (2014) research suggests that employer support for innovative work positively influences employees' job satisfaction, which can lead to improved JOB. Furthermore, the study by Sukor et al. (2018) demonstrates a positive relationship between workplace IL and job satisfaction, indicating that continuous workplace learning contributes to increased levels of job satisfaction. This aligns with the findings of (Daryoush, 2013), which suggest that workplace learning directly influences employee task and contextual performance.

The acquisition of EMP competencies is influenced by factors such as transformational leadership, IL and reflective practice (Elsen et al., 2022). EMP competencies are not only crucial for job acquisition, but also for job retention and career progression. The learning environment, curriculum design and teacher quality significantly influence the competencies acquired by students. In addition, lifelong learning plays a vital role in the improvement of EMP, especially in self-employment scenarios later in life. In conclusion, the development of EMP competencies is a multifaceted process that involves a combination of IL, reflective practice, soft skills and a conducive learning environment. These competencies are essential not only for getting a job, but also for career advancement and adaptability in a constantly evolving labor market.

Contrary to what was initially formulated, IA is a tool that, according to the results, decreases the relationship between EMP and JOB. Thus, further research should be carried out to analyze the different types of learning and their moderating relationship; it is possible that formal learning is a determining factor in completing the analysis model as analyzed by Froehlich et al (2014)

The results of this research provide additional support for previous research on the relationship between IL, EMP, and JOB of business school management program graduates in their first work experiences. Few studies examine learning outcomes in this segment; in fact, previous studies have only paid attention to employee performance without specifying the timing of the work experience. The findings suggest that schools and academic departments should develop employability competencies through informal learning to produce more efficient and productive graduates; this development can be generated through extra-academic activities such as study circles, seminars, workshops and lectures. Likewise, extra-academic activities can be developed through the technological tools of distance education.

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