

Factors which cause enterprises to invest in training. The Spanish case*

Rosa María Muñoz Castellanos¹, María Yolanda Salinero Martín²

Abstract

The purpose of this study is to detect which variables influence a business when deciding whether or not to invest in the training of its employees. We pay attention to this practice because, as many previous studies suggest, it leads to an increase in worker productivity and because investment in training activities is a manner by which to increase the inimitability of human resources. A Binomial Logit Model is applied to a sample of 94 Spanish businesses from various sectors. The results have allowed us to confirm that businesses following the Porter differentiation strategy invest more in training. We have also reached the conclusion that companies with high percentage of temporary workers do not tend to set up training programmes.

Key words: human resources, training, strategy, differentiation, temporary workers

JEL classification: M, M5, M53

* Received: 13-01-2011; accepted: 06-06-2011

¹ Full Professor, Department of Administración de Empresas, University of Castilla-La Mancha, Faculty of Law and Social Sciences, Cobertizo de San Pedro Mártir s/n 45071, Toledo, Spain. Scientific affiliation: human resource management, training, corporate strategy, corporate social responsibility, ethics. Fax: 34902204130. E-mail: RosaMaria.Munoz@uclm.es

² Full Professor, Department of Administración de Empresas, University of Castilla-La Mancha, Faculty of Law and Social Sciences, Cobertizo de San Pedro Mártir s/n 45071, Toledo, Spain. Scientific affiliation: human resource management, training, human capital, corporate strategy, resource-based theory. Fax: 34902204130. E-mail: Yolanda.Salinero@uclm.es

1. Introduction

At present the added value in businesses is not provided by machines, but by people. The employee increasingly provides less physical effort and more knowledge (Schultz, 1961; Becker, 1964). This can create sources of competitive advantage, which have traditionally sustained a company's success, to lose validity and it is necessary to seek new factors with which to sustain the company's competitiveness. In business literature, two factors stand out as being particularly relevant: the company's human capital and its organisational knowledge (Wright *et al.*, 1994; Pfeffer, 1995; Bollinger & Smith, 2001). Human capital refers to the range of valuable skills and knowledge a person has accumulated over time (Ruzzier, Antoncic, Hisrich & Konecnik, 2007). The business purpose must consequently develop its human element to the full and manage its knowledge correctly.

Training plays an important role in the fulfilment of both objectives. On the one hand, human capital and, according to economic theory, training, lead to an increase in worker productivity, and on the other hand, investment in training activities is a manner by which to increase the inimitability of human resources, which is essential in maintaining competitive advantage (Fahy, 2000). With regard to organisational knowledge, training, amongst other things, provides necessary data, which is internalized by the employee and is then converted into information, and this information is then converted into knowledge through the learning process (Bollinger & Smith, 2001). It also teaches workers to create documentation and to structure and code knowledge, it is a transmission channel of that knowledge, and it acts as a mechanism through which to access that knowledge (Alavi & Leidner, 2001; Earl, 2001). Therefore, in this context, we should highlight the growing importance in recent years of worker training as a fundamental practice in the development of competitive advantage.

The main objective of this work is to discover which variables influence a business to decide whether or not to invest money in the training of its employees.

The resource-based theory considers the training of human resources to be a strategic element provided that it fulfils the following conditions (Úbeda, 2005):

- It has the characteristics needed by a strategic resource to be a potential element in competitive advantage: durability, transmission and replication impossibility as well as lack of transparency.
- Possibilities exist for the business to appropriate the returns generated from the training of its human resources.

Training is considered to be one of the most significant processes in the Strategic Human Resource Management since (Lawler, 1994; Delaney & Huselid, 1996):

- It plays a critical role in the maintenance and development of capabilities, both of individuals and of organizations, and makes a substantial contribution to the organizational change process.
- It improves the capacity to retain qualified employees, thus reducing the involuntary rotation rate of personnel.
- It indicates the organization's long term commitment to its employees and strengthens individual motivation and commitment to the organization and its objectives.

All of these aspects are transformed into a greater level of competitiveness (Youndt *et al.*, 1996) and into an improvement in productivity and organizational results (Bartel, 1994; Knoke & Kalleberg, 1994; Huselid, 1995; Delery & Doty, 1996).

Moreover, as Kamoche (1996) sustains, interest in human resources formerly centred upon the development of suitable practices. However, these are imitable and do not therefore permit the attainment of a competitive advantage which is sustainable over time. The challenge that personnel management must therefore face is that of considering the human element not as a simple 'resource' by means of which to capitalise on determined policies, but an accumulation of the individual's knowledge and skills with which a non-identifiable skill should be constructed to outlast that of the business' competitors.

The extent to which training is well designed, applied and integrated into other human resources practices, may therefore help to attract, develop and retain these excellent employees. Training may thus contribute both to raising the employees' commitment level to an organization and consequently increasing its profitability through greater efficiency, productivity and quality, and to attaining lower organizational employee rotation levels and absenteeism (Bonache & Cabrera, 2002).

There are authors who, within a universalist approach, claim that some staff management practices are better than others (Russell, Terborg & Powers, 1985; Bartel, 1994; Delaney & Huselid, 1996).

On the other hand, we can find supporters of the contingent perspective according to whom the training policy along with its objectives will clearly depend on the strategic orientation followed by the firm (Miles & Snow, 1978; Schuler & Jackson, 1987).

Finally, other authors ascribed to the configurational approach, consider that human resources practices must be seen as a system (Wright & Snell, 1991) in order to achieve synergies that can improve results.

In order to achieve the objectives established in this paper we decided to use the contingent approach because it provides a theoretical basis to analyse the connection between training policy and firm strategy.

The hypotheses we want to confirm in this research is that some variables like size of business, activity sector, strategy variables, stability in the job, existence of human resource department or business culture can influence a business to decide whether or not to invest money in the training of its employees. We shall consider the general strategy that the business chooses to be of particular importance. We shall pay particular attention to the two typologies which, according to existing literature, can be considered to be those most widely used in the field of strategy and in those models which relate strategic decisions and HR practices: those proposed by Miles and Snow (1978) and Porter (1980).

This work is structured as follows: we shall first present the methodology, measurement of the variables and empirical analysis; we shall then go on to describe the manner in which the information was obtained and the methods that were used to develop the statistical analysis; finally, we shall present the principal results and the main conclusions of this research.

2. Methodology, measurement of the variables and empirical analysis

In the empirical work we have constructed a Binomial Logit Model to discover which variables influence a business when deciding whether or not to invest money in training. Logit models attempt to explain how the dependent variable (criterion) is explained by the independent variables (predictors). The dependent variable in these models must be dichotomic.

Logistic regression is an extension of regression but with an outcome variable that is a categorical variable and predictor variables that are continuous or categorical. This means that we can predict which of two categories a company is likely to belong to given certain other information.

In simple linear regression, the outcome variable Y is predicted from the equation of a straight line. In logistic regression, instead of predicting the value of a variable Y from several predictor variables, we predict the *probability* of Y occurring by given known values of Xs. The probability of Y is predicted by logistic regression equation as follows:

$$y_i = \frac{1}{1 + e^{-(\beta_1 x_{2i} + \beta_2 x_{2i} + \dots + \beta_k x_{ki})}} + u_i$$

Where:

y_i is the dichotomy variable. In our case this will take the value of 1 if the business invests in training and 0 if it does not. After the estimation, the model will inform us of the probability of this variable being worth 1 for the value of explicative variables presented by business i ;

y_{ki} is the value of explicative variable k for business i , and

u_i is the error of the model. This is distributed as $N(0, \sigma^2)$.

We use the log-likelihood statistic to assess the fit of the model. It is analogous to the residual sum of squares in multiple regression in the sense that it is an indicator of how much unexplained information there is after the model has been fitted. The larger the value of the log-likelihood, the more unexplained observations there are. The first step is to present the baseline model that in logistic regression is the model when only the constant is included. If we then add one or more predictors, we can compute the improvement of the model as follows (McCullagh y Nelder, 1989):

$$LR = -2(\ln L_{bl} - \ln L)$$

Where:

LR : log-likelihood statistic

L_{bl} : baseline log-likelihood

L : new log-likelihood

So, merely take the new model and subtract from it the baseline model. It gives the result a Chi-square distribution with degrees of freedom equal to the number of parameters, k in the new model minus the number of parameters in the baseline model.

Various methods for the selection of explicative variables which form part of the specification of the model exist. These can, in essence, be synthesized into forward stepwise methods and backward stepwise methods. The former start from a basic or initial specification in which there is no explicative variable, and progressively add variables which contribute towards improving the model. Backward stepwise methods are based on the inverse process. They start from a specification in which all the explicative variables appear, and the variables which contribute least to the model's quality are progressively eliminated in accordance with the measurement criterion of said established quality. According to the quality assessment method of the model used, variants may simultaneously exist in the forward stepwise and the backward stepwise methods. A generally accepted method is the Chi-square test. This test indicates whether the parameters in its set are, for a confidence of 95%,

significant (i.e., the null hypothesis which states that all the parameters are null is rejected) in all the estimations made. The rejection of this hypothesis (the value of the statistic is greater than the tabulated value) implies that the estimated model significantly improves the results. We have used the Chi-square test as our selection criteria, and have selected the model specification as regards the exogenous variables which make the greatest contribution in order to explain businesses' decisions to invest in training in terms of probability. Both the forward stepwise method and the backward stepwise method have attained the same result. This has been verified by using other alternative criteria which were available in the software used: the criterion based on the statistical significance of the variables in accordance with the Wald statistic, and the Conditional method based on both the verisimilitude ratio when rejecting variables, and that of Wald when adding them. The same result was attained in all cases: to consider the following as being the only significant variables: "The Porter Strategy" and "The Workers' Temporality". The remaining variables were rejected.

The following variables serve as a basis for the empirical contrast of the model:

- Identification variables (size of business, activity sector and legal status).
- Strategy variables (Porter and Miles and Snow strategies).
- Training variables (temporality of employees, existence or otherwise of human resources department and business culture).

The aforementioned variables are described as follows.

Identification variables

The questionnaire (See Appendix) included questions relating to the business' identification, thus allowed us to verify whether the information we had was exact and updated. We therefore asked for information concerning the number of workers, the company's legal status and what activities it carried out.

a) Size of business. The question relating to the number of employees in the business allowed us to measure its size, which is expressed as a natural logarithm of the number of employees. The relationship between the size and the orientation of the human resources management processes has been analysed in numerous research works. Size is specifically one of the variables that Mintzberg (1984) states is a determiner of the organization's training related parameters. The size of the business can be measured through various indicators, such as: number of employees, turnover, assets, sales, etc. In our work we have opted for the number of employees. This choice was fundamentally motivated by the expression of a large amount of the aforementioned indicators in monetary terms, which implied an important variability in the data. It is, moreover, the most frequently used variable in the majority of the

studies carried out, and the connotation of human resources in our study led us to a direct consideration of this parameter.

b) Activity Sector. We have transformed this variable, which appears nominally in the questionnaire, into numbers through the National Classification of Economic Activities (NCEA) using four digits. The sector will allow us to group those businesses which carry out similar activities and to make comparisons between businesses in different sectors. Some authors, such as Peraita (2000), state that the probabilities of receiving training is higher in the activity sectors that incorporate technological change with greater frequency and in those occupations that imply organizational tasks and business resources management.

Strategy variables

Various competitive strategy classifications exist. We shall examine those which are most frequently used in the field of strategy, along with those models that relate strategic decisions and HR practices, i.e., those proposed by Miles and Snow (1978) and Porter (1980).

a) The Miles and Snow (1978) typology. In this work, various reasons have led us to opt for the Miles and Snow (1978) typology. First because of the existing empirical support with regard to its validity and reliability, (Shortell & Zajac, 1990; James & Hatten, 1995), and second because it is frequently used in research into human resources strategy management. Moreover, Miles and Snow (1984) later explicitly developed the theoretical implications of said typology in human resources practices. Miles and Snow (1978) propose a competitive strategy typology according to which, within each activity sector, it is possible to distinguish four types of organizations: defensive companies, explorer companies, analytical companies and reactive companies. The key underlying dimension of this classification is the speed with which the organizations react to changes in the environment and modify their products and the markets to which those products are directed (Hambrick, 1983).

b) The Porter (1980) typology. We have also considered Porter's cost and differentiation generic strategies typology. Businesses define their strategies with a greater exactness when they use this typology as a basis, since that their knowledge is more precise when considering whether consumers consider their products to be different or whether, on the contrary, the basis of their sales lies in their low cost. This typology also allows us to compare whether investments in personnel (specifically in employee training) are compatible with low cost production.

Training variables

When we speak of training we are referring to the training courses and activities which are either organized by companies or take place as a result of alliances with other businesses, and are accessible to employees of these companies. This definition

has been adopted in the works of Oosterbeek (1996); Lynch & Black (1997); Glover *et al.* (1999); Groot (1999, 2000); Moy & McDonald (2000); Spilsbury (2001); Kitching & Blackburn (2002). We therefore refer exclusively to formal training and we conceptualize this as a structured concept which is offered either in the business itself or in other places during work hours or outside the work timetable. We consider that the following variables could have an influence on training policy:

a) Stability in the job. This variable will be measured through the percentage of personnel in the business' total workforce who have temporary contracts. This variable has been included in the study because differences exist between the temporary and permanent personnel in businesses, and it is generally accepted that permanent employees have priority access to any possibilities of training that are offered (Sauter, 1998), both as a result of the training's future return and because it is usually these employees who are most appropriate for training. Studies tackling this subject exist, and these establish that access to training is increasingly reserved for a business' stable personnel from whom it will attain a greater investment return (Oosterbeek, 1996; Planas & Plassard, 2000). Those employees who receive training will be those that proportion greater rises in productivity for their business during the longest possible period of time (Peraita, 2000). Employees with permanent contracts therefore have a greater probability of receiving training in businesses, which allows us to state that the duration and type of contact influences businesses when carrying out more or less training.

b) Existence of human resources department. The existence of a human resources department may reveal the extent to which a business considers its personnel to be important. Amongst the fundamental aspects of its work is that of detecting the training needs that arise in the company in order to establish any necessary training plans.

c) Business culture. When planning training in a business, previous knowledge of the organizational culture is required since it may simultaneously be a factor of resistance to change and a starting point for the introduction of collective renovation projects. In order to create a continuous learning culture, businesses should develop clear policies which emphasize the importance of training as an instrument which allows results to be improved and which generates rewards to those who apply what they have learned to their work. Regarding the interrelationship between culture and training we should emphasize that (Pineda, 2003): the culture determines the way in which the business views training, i.e., it determines the prevailing training philosophy; the culture determines the way in which training is carried out and the culture also determines the quantity and quality of resources given over to training, which may be material, human or functional. This variable is analysed through the business' response to certain items measured with the 5-point *likert* scale. We have considered: whether the business culture promotes training and whether the principle "training increases profitability" is part of the business culture.

Therefore, the model has been estimated with the variables we have just explained:

- Activity sector
- N° employees
- Legal status
- Porter strategy
- Miles and Snow strategy
- Employee temporality
- Existence of HR department or otherwise
- Culture

The main results obtained from the study are the following ones: the companies that develop a differentiation strategy make a greater effort in training than those that follow a cost leader strategy and temporality of the job makes a negative impact on the decision to train personnel. We will explain these results and discuss them in section 4.

3. Data collection method and treatment of information

The information was gathered through a postal questionnaire which was addressed to the person in charge of the company's human resources department, or failing this, to the managing director.

Before sending the definitive questionnaire, a pre-test was carried out with ten companies from different sectors, which took place in the form of personal interviews.

After improving the questionnaire with the information obtained from the pre-test and with the help of suggestions made by teachers and experts, it was sent to 572 companies which appeared in the available data bases. The process of collecting the questionnaires terminated with a total of 94 valid responses, which represents a response rate of 16.5%.

The sample of businesses used in this empirical study has the characteristics shown in Table 1.

The object population of this study is made up of Spanish companies consisting of over 50 employees in 2007, since medium sized companies do not tend to have a formalized unit with which to manage human resources. When determining this population we have not made any sectorial restrictions in order to avoid bias, as many research projects have been criticized for this (Huselid, 1995). Of the total number of companies, we have only excluded public administration, defence, education and health as we consider that the training processes in these activities are subject to different criteria than those of the remaining sectors.

Table 1: Description of sample

Object studied	Businesses of over 50 employes
Country	Spain
Population	572 Businesses
Sample size	94 Valid questionnaires (16,5%)
Sample error	9,2%
Sectors	All

Source: Author's calculation

4. Results and discussion

The categorical variables codings are presented in Table 2.

Table 2: Categorical variables codings

Categorical variables		Frequency	Parameter coding					
			(1)	(2)	(3)	(4)	(5)	(6)
Activity sector	1	17	1.000	.000	.000	.000	.000	.000
	2	24	.000	1.000	.000	.000	.000	.000
	3	13	.000	.000	1.000	.000	.000	.000
	4	21	.000	.000	.000	1.000	.000	.000
	5	10	.000	.000	.000	.000	1.000	.000
	6	5	.000	.000	.000	.000	.000	1.000
	7	4	.000	.000	.000	.000	.000	.000
Legal status	Plc.	54	1.000	.000	.000			
	Ltd.	34	.000	1.000	.000			
	Cooperative	5	.000	.000	1.000			
	Self-employed	1	.000	.000	.000			
Strategy	Cost leader	21	1.000	.000				
	Differentiation	49	.000	1.000				
	Middle position	24	.000	.000				
Strategic orientation	Defensive	4	1.000	.000				
	Analytical	58	.000	1.000				
	Explorer	32	.000	.000				
Training department	Yes	58	1.000					
	No	36	.000					

Source: Author's calculation

In regression analysis variables need to be continuous so, if you want to use categorical predictors, you should incorporate them into regression by recoding them using zeros and ones (known as dummy coding). That is what we have done with the following variables: activity sector, legal status, Porter’s strategy, Miles and Snow’s strategy and existence of HR department.

The results of the model parameter estimation are shown in the Table 3. You have to pay attention to the second step, that is, the final results. The Table 4 presents the variables not in the equation.

Table 3: Binomial logit model

	Variables	B	S.E.	Wald	df	Sig.	Exp(B)
<i>Step 1(a)</i>	Porter’s strategy			8.647	2	.013	
	Porter’s strategy (1)	1.460	.763	3.659	1	.056	4.308
	Porter’s strategy (2)	1.987	.680	8.532	1	.003	7.292
	Constant	-1.946	.617	9.940	1	.002	.143
<i>Step 2(b)</i>	Porter’s strategy			7.071	2	.029	
	Porter’s strategy (1)	1.445	.785	3.393	1	.065	4.243
	Porter’s strategy (2)	1.846	.695	7.055	1	.008	6.336
	Workers’ temporality	-.418	.188	4.969	1	.026	.658
	Constant	-1.006	.721	1.948	1	.163	.366

a Variable(s) entered on step 1: Porter’s strategy.

b Variable(s) entered on step 2: workers’ temporality.

Note: variables in the equation, method = Forward Stepwise (Likelihood Ratio)

Source: Author’s calculation

The fifth column of table 3 shows which parameters are significant according to the percentage the test. Thus, for example, the parameter that accompanies the “Porter strategy: differentiation” (Porter’s strategy (2) in the table) is significant with a confidence margin of 99%. Only the independent term (constant) is clearly not significant. The “Porter strategy: cost leader” variable (Porter’s strategy (1) in the table) has an associated coefficient which is significant, but for a confidence level of 90%, and cannot therefore be compared with the other variables since these have a higher level of significance.

Both tables show how the variable “workers’ temporality” is added to the model in the second step.

Table 4: Binomial Logit Model

Variables		Score	df	Sig.	
Step 1	Variables	Legal status	4.999	3	.172
		Legal status (1)	4.071	1	.044
		Legal status (2)	3.499	1	.061
		Legal status (3)	.008	1	.927
		Activity sector	2.790	6	.835
		Activity sector (1)	.442	1	.506
		Activity sector (2)	.118	1	.731
		Activity sector (3)	.960	1	.327
		Activity sector (4)	.391	1	.532
		Activity sector (5)	.442	1	.506
		Activity sector (6)	.680	1	.409
		Strategic orientation	.736	2	.692
		Strategic orientation (1)	.101	1	.751
		Strategic orientation (2)	.735	1	.391
		Training department (1)	1.565	1	.211
		Training increases profitability	.661	1	.416
		Culture promotes training	.444	1	.505
		Size	.365	1	.546
		Workers-temporality	5.355	1	.021
	Overall Statistics		14.484	16	.563
Step 2	Variables	Legal status	3.070	3	.381
		Legal status (1)	1.987	1	.159
		Legal status (2)	1.195	1	.274
		Legal status (3)	.027	1	.870
		Activity sector	2.717	6	.843
		Activity sector (1)	1.066	1	.302
		Activity sector (2)	.328	1	.567
		Activity sector (3)	.708	1	.400
		Activity sector (4)	.123	1	.726
		Activity sector (5)	.361	1	.548
		Activity sector (6)	.344	1	.558
		Strategic orientation	.785	2	.675
		Strategic orientation (1)	.203	1	.653
		Strategic orientation (2)	.762	1	.383
		Training department (1)	.727	1	.394
		Training increases profitability	.396	1	.529
		Culture promotes training	.599	1	.439
		Size	.205	1	.651
	Overall Statistics		9.643	15	.842

Note: variables not in the equation, method = Forward Stepwise (Likelihood Ratio)

Source: Author's calculation

Regarding the goodness of the adjustment, three alternative measures have been considered: the Cox and Snell R², the R²-Nag (the percentage of variation explained by the model's independent variables oscillates between 16.4% and 22.3%) and the Hosmer-Lemeshow statistic. (in our case this value is 0.79, for a Chi-square of 3,150 with 6 degrees of freedom, so an acceptable adjustment exists).

The model specification process has shown that the determinant variants when explaining a business' decision to invest or otherwise in training are both the strategy followed, according to the Porter strategy classification, and their level of temporality, as we can see in the following table:

Table 5: Model's variables

Variable	Sign of parameter β	Significance (Wald)	Conclusion
Porter Strategy: Differentiation	+	.008	The differentiation strategy favours training and this is the major factor.
Workers' Temporality	-	.026	Temporality makes a negative impact on the decision to train personnel: the greater the level of temporality the less probable it is that the business will carry out training programmes, this being the second most important factor (β lower)

Source: Author's calculation

This table, which is a summary of table 3, establishes the relationship signs between the decision to invest in training or otherwise, and the two significant variables we have obtained from the statistical study.

The companies that develop a differentiation strategy make a greater effort in training than those that follow a cost leader strategy (Schuler & Jackson, 1987; Kydd & Oppenheim, 1990). Other authors point out that the relationship between training and results differs according to whether a cost or a differentiation strategy is carried out (Arthur, 1992; Procopio & Fairfield-Sonn, 1996; Kidder & Rouiller, 1997; Murray & Raffaele, 1997; Black & Lynch, 2001).

With regard to the second conclusion, it could be explained by the resource-based theory. It can help to understand the conditions under which human resources become "strategic assets" (Mueller, 2000). In the case of human resource training, whether it presents the features of durability, transmission and replication impossibility and lack of transparency. In order to get the majority of them, staff stability is necessary. For this reason, the access to training is increasingly reserved for a business' permanent personnel. Ngoc, Truong and Buyens' (2010) article reviews theory and previous empirical studies on the relationship between training and firm performance and

confirms this theory: workers are more likely to receive training if they have non temporary jobs. Other authors like Oosterbeek (1996), Planas & Plassard (2000), Sauter (1998) and Peraita (2000) have presented the same idea too.

5. Conclusions

The hypotheses we wanted to confirm in this research is that some variables like size of business, activity sector, strategy variables, stability in the job, existence of human resource department or business culture can influence a business to decide whether or not to invest money in the training of its employees.

This hypotheses has been partially confirmed in the sense that we have obtained two determining factors whether a business will or will not invest in training. So the result of our research is that there is a significant influence of: 1) the competitive strategy followed (the differentiation strategy positively influences businesses to invest in training) and 2) temporality, which has a negative influence (the higher the rate of temporality, the less likely the business is to invest in training). We can find some explanations for this result. In companies with cost leader strategies the employees' qualification requirements are reduced and with this, the training efforts carried out. However, in companies with a differentiation strategy, the variety of tasks carried out by employees is greater, and this demands a greater autonomy of performance, which must be accompanied by higher qualifications and an elevated motivation to assume the necessary risks in decision making. In cost leader strategies, financial considerations and budgetary restrictions play a crucial role in the design of human resources strategies. With regard to the second assessment, the access to training is increasingly reserved for a business' permanent personnel. Those employees that receive training will be those that proportion greater rises in their business' productivity over the longest possible period of time.

From our point of view, *the main contributions* of this paper are:

- To analyse human resource practices from the contingent approach considering the strategic orientation followed by the firm. The majority of authors have centred on a single perspective alone, while this work researches at some considerable depth the impact of training, considered to be an "excellent" practice, and its link with organizational strategy.
- To reaffirm some conclusions obtained in previous studies in relation to the variables which influence in training. This allows us to state some useful considerations for the economic system and also business policy.

We consider that we have attained the proposed objectives, although we must not forget *the main limitations of this study*. The most important of these is related to the

use of cross-sectional data, which does not allow us to establish exact relationships of causality. Longitudinal data are needed to conclusively replicate the findings presented here.

A further limitation arises from the nature of that which has been studied. The training of personnel, the development of skills, motivation or knowing how to work in a team are intangible elements which are difficult to measure, and are of complex evaluation. It is known that the degree of employees' progress may be diverse, as it depends upon their interest, motivation, capacity, and other factors of the employees who receive said training, which are difficult to measure.

Therefore, with the aim of correcting any possible limitations and completing the study, we intend to broaden it in order to be able to use longitudinal data which will take in a wider range of training-related aspects: the existence of a training plan, evaluation, the concrete training needs detected, the training methods used etc. We shall also consider carrying out this future research with personal interviews and case studies which will permit a more profound analysis. There is also an opportunity for future research to examine the influence of features of job characteristics (e.g., different types of employees as worker, supervisor, office staff, manager) as well as the dependence of the country.

Finally, the main results of this research allow us to set out some recommendations for implementations of the economic system and also business policy. Managers of cost leader companies should be conscious of the negative influence that certain decisions may have on the development of the training which, under the right conditions, could contribute to the improvement of organizational results. They should also be aware of the consequences of making fixed-term contracts as a usual practice: it does not permit to take advantage of the long term benefits of the training. The conclusions obtained could also be useful for government regulation in relation to training subsidies, job contracts regulation, etc.

References

- Alavi, M. & Leidner, D.E. (2001) "Review: Knowledge Management and Knowledge Management Systems: conceptual foundations and research issues", *MIS Quarterly*, 25(1), 107-136.
- Arthur, J.B. (1992) "The link between business strategy and industrial relations systems in America steel minimills", *Industrial and Labour Relations Review*, 45, 488-506.
- Bartel, A. (1994) "Productivity gains from the implementation of employee training programs", *Industrial Relations*, 33, 411-425.
- Becker, G. (1964) *Human Capital*, NY: Columbia University Press.

- Becker, G. & Gerhart, B. (1996) "The impact of human resource management on organizational performance: progress and prospects", *Academy of Management Journal*, 39, 779-801.
- Black, S.E. & Lynch, L.M. (2001) "How to compete: the impact of workplace practices and information technology on productivity", *The Review of Economics and Statistics*, 83, 434-445.
- Bollinger, A.S. & Smith, R.D. (2001) "Managing organizational knowledge as a strategic asset", *Journal of Knowledge Management*, 5, 8-18.
- Bonache, J. & Cabrera, A. (2002) *Dirección estratégica de personas. Evidencias y perspectivas para el siglo XXI*, Madrid: Prentice Hall.
- Delaney, J. & Huselid, M. (1996) "The impact of human resources management practices on perceptions of organizational performance", *Academy of Management Journal*, 39, 949-969.
- Delery, J.E. & Doty, D.H. (1996) "Models of theorizing in strategic human resource management: test of universalistic, contingency and configurational performance predictions", *Academy of Management Journal*, 39, 802-835.
- Earl, M. (2001) "Knowledge Management Strategies: towards a taxonomy", *Journal of Management Information Systems*, 18(1), 221-233.
- Fahy, J. (2000) "The resource-based view of the firm: some stumbling –blocks on the road to understanding sustainable competitive advantage", *Journal of European Industrial Training*, 24(2), 94-104.
- Glover, R., Long, D., Haas, D. & Alemani, C. (1999) *Return-on-investment (ROI) Analysis of education and training in the construction industry*, Workforce Thrust Team, Texas: Texas University.
- Groot, W. (1999) "Productivity effects of enterprise-related training", *Applied Economics Letters*, 6, 369-371.
- Groot, W. & Maassen, H. (2000) "Education, training and employability", *Applied Economics*, 32, 573-581.
- Hambrick, D.C. (1983) "Some tests of the effectiveness and functional attributes of Miles and Snow's Strategic Types", *Academy of Management Journal*, 26(1), 5-26.
- Huselid, M. A. (1995) "The impact of human resource management practices on turnover, productivity, and corporate financial performance", *Academy of Management Journal*, 38(3), 635-672.
- James, W.L. & Hatten, K.J. (1995) "Further evidence on the validity of the self typing paragraph approach: Miles and Snow Strategic Archetypes in Banking", *Strategic Management Journal*, 16, 161-168.
- Kamoche, K. (1996) "Strategic Human Resource Management Withing a Resource Capability of the Firm", *Journal of Management Studies*, 33(2), 213-233.

- Kidder, P.J. & Rouiller, J.Z. (1997) "Evaluating the success of a large-scale training effort", *National Productivity Review*, 16, 371-380.
- Kitching, J. & Blackburn, R. (2002) "The nature of training and motivation to train in small firms", *Research Report*, 330, Small Business Research Center Kingston University.
- Knoke, D. & Kalleger, G. (1994) "Job training in US organizations", *American Sociological Review*, 59, 537-546.
- Kydd, C.T. & Oppenheim, L. (1990) "Using human resource management to enhance competitiveness: lessons from four excellent companies", *Human Resource Management*, 29, 145-166.
- Lawler, E.E. (1994) "Total quality management and employee involvement. Are they compatible?", *Academy of Management Executive*, 8.
- Lynch, L. & Black, S. (1997) "Beyond the incidence of training: evidence from a national employers survey", *NBER Working Paper*, 362, Cambridge.
- McCullagh, P. & Nelder ELDER, J.A. (1989) *Generalized Linear Models*, Chapman & Hall.
- Miles, R.E. & Snow, C.C. (1984) "Designing Strategic Human Resource Systems", *Organizational Dynamics*, 31(1), 36-52.
- Mintzberg, H. (1984). *La estructuración de las organizaciones*, Barcelona: Ariel.
- Moy, J. & McDonald, R. (2000) *Analysing enterprise returns on training*, NY: National Center for Vocational Educational Research.
- Mueller, F. (2000) "Human resources as strategic assets: an evolutionary resource-based theory". In Mabey, C. et al. (Ed.), *Strategic Human Resource management*, London: Sage Publications.
- Murray, B. & Raffaele, G.C. (1997) "Single-site, results level. Evaluation of quality awareness training", *Human Resource Development Quarterly*, 8, 229-245.
- Ngoc, T., Truong, Q. & Buyens, D. (2010) "The relationship between training and firm performance: a literature review". *Research & Practice in Human Resource Management*, 18(1), 28-45.
- Oosterbeek, H. (1996) "A decomposition of training probabilities", *Applied Economics*, 28, 799-805.
- Peraita, C. (2000) "Características de la formación en la empresa española", *Papeles de Economía Española*, 86, 295-307.
- Pfeffer, J. (1995) *Competitive advantage through people*, Boston: Harvard Business School Press.
- Pfeffer, J. (1998) "Seven practices of successful organizations", *California Management Review*, 40, 96-124.
- Planas, J. & Plassard, J. M. (2000) "La inversión en formación inicial como condición previa para las inversiones en formación a lo largo de la vida", *Efficacité versus équité en économie sociales*, Ediciones L'Harmattan.

- Porter, M. (1980) *Competitive Strategy*, NY: Free Press.
- Procopio, A.J. & Fairfield-Sonn, J.W. (1996) "Changing attitudes toward quality. An exploratory study", *Group and Organizational Behaviour*, 10, 257-303.
- Russell, J., Terborg, J. & Powers, M. (1985) "Organizational productivity and organizational level training and support", *Personnel Psychology*, 38, 849-863.
- Ruzzier, M. Antoncic, B., Hisrich, R.D. & Konecnik, M. (2007) "Human capital and SME internationalization: a structural equation modeling study", *Canadian Journal of Administrative Sciences*, 24, 15-29.
- Sauter, E. (1998) "Riesgos y oportunidades de la formación en el proceso de trabajo". In CEDEFOP, *El papel de la empresa en la formación permanente*, Office for Official Publications of European Communities, Luxembourg.
- Schuler, R.S. & Jackson, S.E. (1987) "Linking competitive strategy with human resource practices", *Academy of Management Executive*, 1, 207-219.
- Schultz, T.P. (1961) "Investment in Human Capital", *American Economic Review*, 51(1), 1-17.
- Shortell, S.M. & Zajac, E.J. (1990) "Perceptual and archival measures of Miles and Snow's Strategic Types: a comprehensive assessment of reliability and validity", *Academy of Management Journal*, 33, 4, 817-832.
- Sonnenfeld, J. A. & Peiperl, M. A. (1988) "Staffing policy as a strategic response: a typology of career systems", *Academy of Management Review*, 13, 588-600.
- Spilsbury, D. (2001) Learning and training at work 2001", *Research Report*, 334, Department for Education and Skills.
- Úbeda, M. (2005) "Training and business performance: the Spanish Case", *International Journal of Human Resource Management*, 16(9), 1691-1710.
- Wright, P.M., McMahan, G.C. & McWilliams, A. (1994) "Human resources and sustained competitive advantage: a resource-based perspective", *The International Journal of Human Resource Management*, 5, 301-326.
- Wright, P.M. & Snell, S.A. (1991) "Toward and integrative view of strategic human resource management", *Human Resource Management Review*, 1(3), 203-205.
- Youndt, M.A., Snell, S.A., Dena, Jr., J.W. & Lepeak, D. (1996) "Human resource management, manufacturing strategy, and firm performance", *Academy of Management Journal*, 39, 836-866.

Čimbenici koji motiviraju poduzeća za ulaganje u osposobljavanje. Španjolska studija

Rosa María Muñoz Castellanos¹, María Yolanda Salinero Martín²

Sažetak

Svrha ovog istraživanja bila je otkriti koje varijable prilikom poslovnog odlučivanja utječu na ulaganje ili neulaganje u obrazovanje svojih zaposlenika. Fokus je stavljen na brojne prethodne studije koje sugeriraju da ono što dovodi do povećanja produktivnosti radnika jesu ulaganja u aktivnosti izobrazbe, jer se na taj način može povećati jedinstvenost ljudskih resursa. Binomni Logit model je primijenjen na uzorku od 94 španjolskih tvrtki iz različitih sektora. Rezultati su omogućili potvrdu da tvrtke koje provode Porterovu strategiju diferencijacije više ulažu u osposobljavanje. Također se došlo do zaključka da tvrtke s visokim postotkom radnika na određeno vrijeme nisu sklone organiziranju programa osposobljavanja.

Ključne riječi: ljudski resursi, osposobljavanje, strategija, diferencijacija, privremeni radnici

JEL klasifikacija: M, M5, M53

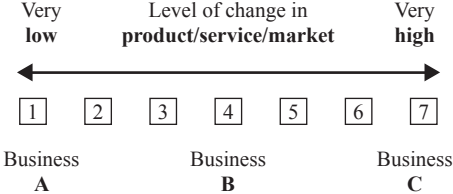
¹ Redoviti profesor, Department of Administración de Empresas, University of Castilla-La Mancha, Faculty of Law and Social Sciences, Cobertizo de San Pedro Mártir s/n 45071, Toledo, Španjolska. Znanstveni interes: upravljanje ljudskim resursima, osposobljavanje, korporacijska strategija, društvena odgovornost, etika. Fax: 34902204130. E- mail: RosaMaria.Munoz@uclm.es

² Redoviti profesor, Department of Administración de Empresas, University of Castilla-La Mancha, Faculty of Law and Social Sciences, Cobertizo de San Pedro Mártir s/n 45071, Toledo, Spain. Znanstveni interes: upravljanje ljudskim resursima, osposobljavanje, ljudski kapital, korporacijska strategija. Fax: 34902204130. E- mail: Yolanda.Salinero@uclm.es


Appendix

Questionnaire

1. Orientation strategy developed in products/services/markets under your responsibility (your business) in last two years: (study the four types of orientation strategies described thoroughly and indicate which is closest to your company on the scale of 1 to 7 shown on right)

<p>Business A is in the niche in the sector which offers a set of relatively stable products/services. Business A is not generally at the forefront of new services, new products or market developments within the sector. Business A tends to ignore changes which do not have a direct impact on its current areas of activity and concentrates on doing the best work possible in existing areas.</p>	<p>Place your business in the following continuous scale between 1 (low level of change in products/services/markets, type A business) and 7 (high level of change in products/services/markets, type C business), bearing in mind its correspondence (the seven possible positions – the business types – are extreme and their only purpose is to make the evaluation clear). If you business is type D, write this at the side of the scale.</p>
<p>Business B maintains a relatively stable base of services/products whilst simultaneously moving towards promising new developments in services, products and markets. Business B is rarely the first in these new products/services/markets. However, through detailed observation of businesses such as C (below), business B attempts to provide a better conceived or more cost-efficient product/service.</p>	
<p>Business C makes frequent changes to the set of products/services offered (particularly incorporations). Business C systematically attempts to be a pioneer and to be the first in new product/service areas and market activities, even when not all its efforts ultimately attain a great amount of success. Business C responds quickly to incipient signs of new market opportunities or needs.</p>	
<p>Business D may behave at any given moment like any of the previously mentioned businesses, and is not therefore clearly identifiable with any of them.</p>	

2. Indicate to what extent you agree with the following strategies: (1 = cost leader business; 5 = intermediate position ; 7 = differentiated business, according to definitions in right-hand square)

	<p>Cost leader: its main interest lies in attaining low costs in relation to its competitors. Differentiation: its main interest lies in creating something that is perceived as being unique in the superior characteristics of the product, customer service, brand image and/or returns.</p>
---	---

3. Indicate number of employees on company's staff: What percentage of personnel have temporary contracts?

4. Indicate whether the company carries out any type of training, and through which organization:

	FINANCIAL ENTITY			
	Trade Unions	Business Confederation	Sector Associations	Company
Yes, and we have a training plan.				
Yes, but we do not have a training plan.				
There is no training.				

5. Identity of company:

Main activity: :	Others:
N° of work centres:	Year in which set up:
Legal status:	Position of person responding to questionnaire:

6. Business culture: (1 = completely agree; 5 = completely disagree).

The business culture promotes training	1	2	3	4	5
The principle "training increases profitability" is part of the business culture	1	2	3	4	5

