IMPACT OF MANAGERS TRAINING IN THE COMPANY OUTCOMES

Mª ISABEL BARBA ARAGÓN
NURIA NEVERS ESTEBAN LLORET
RAQUEL SANZ VALLE

London 13th October, 2011

INDEX

Page

INTRODUCTION 5

1.- MANAGERS TRAINING 8

2.- REVIEW OF LITERATURE ON TRAINING. SPECIAL REFERENCE TO LITERATURE ON MANAGERS TRAINING 11

2.1.- Training measures 11

2.2.- Performance measures 13

2.3.- Special reference to literature on managers training. 14

2.4.- Conclusions 16

3.- RESEARCH PROJECT PROPOSAL...18

3.1.- Research purpose and progress beyond the state of the art...............................19

3.2.- Research method 21

3.2.1.- Quantitative research: sample 21

3.2.2.- Quantitative research: data collection 22

3.2.3.- Quantitative: data analysis 23

3.2.4.- Qualitative research...24

3.3.- Participants...24

3.4.- Work plan...25

3.5.- Expected results 27

3.6.- Dissemination of results...27

3.7. Estimated work hours...28

3.8. Budget ……………………………………………………………………….. 30

4.- REFERENCES..31

ANNEX: Table 1 41

INTRODUCTION.

There is a general recognition in the literature that training leads companies to be more successful (Kraiger, 2003) that is, that training improves organizational performance. Some theoretical perspectives support this idea. The approach most used in empirical research on training is the *universalistic perspective*. This approach holds that some human resources practices are always better than others because they always have a positive impact on performance and, therefore, that all organizations should adopt these best practices (Delery and Doty, 1996). One of these best practices is training and, in particular, formal training (Bartel, 1994; Russell, Terborg, and Powers, 1985). The assumption underlying this affirmation is that training plays a key role in enhancing two of the main sources of competitive advantage for the firm: its human capital (Bartel, 1994; Macduffie and Kochan, 1995; Raghuram, 1994) and its organizational knowledge (Alavi and Leidner, 2001; Bollinger and Smith, 2001).

The *resource-based view of the firm* also provides support for the idea that training has a positive effect on firm performance. According to this perspective, the main sources of competitive advantage for the firm are its intangible resources (Barney, 1991). Among these, human resources, in particular human knowledge, skills and attitudes, are highlighted (Barney and Wright, 1998; Kamoche, 1996; Mueller, 1996; Wright, McMahan, and McWilliams, 1994). Although all practices of personnel management are involved in the development of these resources, training is considered the main activity in getting qualified, flexible and well prepared employees (Bae and Lawler, 2000; Bartel, 1994; Macduffie and Kochan, 1995; Raghuram, 1994).

More recent studies have based their research on the *knowledge perspective.* Today, organizational knowledge is considered a very important source of competitive advantage and human beings are considered the main element in knowledge creation (Huber, 1991; Kim, 1993; Lang, 2001; Nonaka and Takeuchi, 1995). From this approach, the literature reports the importance of the broad application of training in order to develop employee learning capabilities (Alavi and Leidner, 2001; Bollinger and Smith, 2001; Frey, 2001; Kamoche and Mueller, 1998; Lee and Yang, 2000; McGill and Slocum, 1993; Ulrich, Jick, and Von Glinow, 1993).

Although training is important for any employee, it is essential for managers because they play a key role in a company's success (Collins and Clark, 2003). A firm's manager, with his knowledge, skills, experience and motivation, is considered to be an important resource for generating sustainable competitive advantages (Pickett, 1998; Pffefer, 1998). Based on the tendency to focus on those resources that are most scarce and valuable, much of the literature in the area of human resources touches on good managers as particularly rare resources (Acquaah, 2003; Barney, 1991; Castanias and Helfat, 1991 y 2001; Gerstein and Reisman, 1983; Gupta and Govindarajan, 1984; Guthrie et al., 1991; Kor, 2003; Mahoney, 1995; Mahoney and Pandian, 1992), with a high potential to generate value for the company.

Despite the presumed positive effect of training on all levels of organizational outcomes: individual and team, organizational and social (Aguinis and Kraiger, 2009), training is often criticized for being too expensive, not transferred to the workplace or for being implemented only to reward and retain certain employees (Kraiger, McLinden, and Casper, 2004). One of the reasons for this skepticism about the relation between training and performance is that companies do not evaluate their training programs (Alliger, Tannenbaum, Bennett, Traver, and Shotland, 1997; Wright and Geroy, 2001) and, therefore, they do not know if this expenditure really helps them to achieve their objectives. In fact, most firms which evaluate training use only self-administered reports completed by the trainees.

Moreover, although there has been an increase in the empirical studies on the relation between training and performance over the last two decades (Barrett and O'Connell, 2001; Bartel, 1994; Bartel, 1995; Birdi et al., 2008; Connerley, 1997; Danvila-del Valle, Sastre-Castillo, and Rodríguez-Duarte, 2009; Holzer, Block, Cheatham, and Knott, 1993; Huselid, 1995; Kidder and Rouiller, 1997; Lengermann, 1996; Murray and Raffaele, 1997; Ng and Siu, 2004; Tzafrir, 2006), they do not always provide evidence to support such a relation, or they showed mix results (Aragón, Barba, and Sanz, 2003; Black and Lynch, 1996; Krueger and Rouse, 1998; Schonewille, 2001).

According to Tharenou et al. (2007), research about the effects of training on performance remains sparse, especially at the organizational level of analysis. The results of their meta-analysis from 67 studies suggest that training is positively related to human resource outcomes and other organizational outputs but is only very weakly related to financial performance.

Empirical evidence particularly focus on managers training is even weaker. There are only a few isolated studies and little is known about how organizations benefit from investment in managers training. Despite the benefits argued from a teoretical point of view, yet companies continue to support training and development largely as an act of faith (Tamkin and Hillage, 1999).

A number of reasons have been put forward to explain the lack of empirical support for the relationship between training and performance. One is the technical complexity associated to the process of evaluating training effects. For instance, there is a lack of agreement about how to measure training efforts and training returns. Danvila del Valle et al. (2009) defend the need of using different measures of training efforts to capture the real efforts the company makes in training because, in their opinion, it is not possible to do it with any single measure. But the main problem that literature usually highlights is a likely lag effect in the relationship between training efforts and performance, an effect that is not tested enough because of the cross-sectional nature of most of the previous studies. That is to say, training does not have a direct effect on performance, but an indirect effect by improving employees' performance and other organizational outcomes. Others suggest that training requires an investment of resources and employees' time in order to receive it, or, for example, for the adoption of new practices and routines, and that consequently training may reduce the productivity of personnel in the short-term.

The purpose of this project is to analyze the relation between managers training and performance, in the sense of obtaining a valuable tool that will empirically support firms manager training decisions. First, we review the literature on this topic. Second, the paper proposes a research project for analyzing the effects of training managers on firms performance. This project would try to avoid previous research limitations

1.- MANAGERS TRAINING.

Training can be defined as the systematic acquisition and development of the knowledge, skills, and attitudes required by employees to adequately perform a task or job or to improve performance in the job environment (Goldstein, 1993).

When training results in improvements in significant knowledge and the acquisition of relevant skills, employee job performance should improve, due to fact that the skills the employee learns in training will be transferred to the job (Baldwin and Ford, 1988). Furthermore, improvement in job performance should be reflected in organizational outcomes (Tharenou *et al.*, 2007).

As mentioned, according to the resource-based view of the firm, resources that add positive value, that are unique, imperfectly imitable, and can only be substituted by competitors with difficulty can be a source of competitive advantage for a firm, thereby resulting in superior performance (Barney, 1991). However, Basterretxea and Albizu (2010) consider that companies can achieve a higher degree of profitability not only through the resources they possess, but also through an effective and innovative management of those resources, something that the management team has the main responsibility for. Meanwhile, Galán and Vecino (1997) point out that business management skills are the real source of profitability and Cuervo (1993) highlights the capabilities of managers as one of the variables that explain corporate success. Similarly, Holcomb, Holmer and Connelly (2009) indicate that managers are a potential source of value creation for the firm.

There are several reasons to believe that better managerial ability allows firms to exploit the untapped value of resources. First, superior knowledge of factor markets enable managers to be more effective than rivals at selecting valuable resources and negotiating their use on favourable terms (Makadok, 2001). Managers with more accurate expectations concerning their future value are more able to exploit market imperfections for developing or acquiring resources (Amit and Schoemaker,1993; Denrell, Fang, and Winter, 2003; Thomke and Kuemmerle, 2002). Second, managers with better knowledge of the firm and industry context are more likely to design strategies that create value by being more effective than rivals at bundling and deploying resources in new ways (Hansen et al., 2004; Lippman and Rumelt, 2003; Miller, 2003). Moreover, when managers reinforce and preserve their knowledge through experience, they deepen their skill sets and improve their value to the firm.

Managers play a key role in the analysis of the environment, in choosing the path of the company, the combination of resources that will be used at each stage and the markets in which it will compete (Acquaah, 2003; Castanias and Helfat, 2001; Kor, 2003; Lado and Wilson, 1994; Mahoney and Pandian, 1992). Complementary to this claim, Kor (2003) regards valuable managers as those that achieve a better use of human resources by properly assigning employees to posts, projects and teams where they obtain a higher productivity for the company. It is the responsibility of managers to design learning teams that facilitate getting the desired results (Senge, 1990).

Managers differ in the quality and quantity of the skills they possess. These differences in managers' abilities include both the types of skills that each individual has, as well as the level of their skills. Moreover, managers may differ in the combination of types and levels of skills (Castanias and Helfat, 2001).

According Basterretxea and Albizu (2010), each of the different types of management skills may be rare if a manager has a skill of a higher quality in relation to his/her competitors. This scarcity will be greater in terms of firm-specific knowledge, knowledge shared by the management team and, to a lesser extent, in terms of sector-specific knowledge (Kor, 2003). Even generic skills can be rare at their highest levels.

Unique historical conditions, causal ambiguity and social complexity are factors that can prevent the imitation and substitution of rare and valuable managers, enabling their companies to achieve sustainable competitive advantages (Mahoney, 1995). In similar terms, Cuervo (1993) considers that valuable managers may lead to obtaining sustainable competitive advantages since it is difficult for competitors to link the intangible skills of managers with company results; besides, many managers' skills are firm-specific, which reduces their chances of being transferred and imitated.

Acquaah (2003), in his analysis of corporations with abnormally high levels of profitability, found that management skills have a positive influence on the sustainability of high profitability levels. According to this author, management skills contribute significantly to the entire set of resources and specific capabilities that enable certain firms to generate sustainable competitive advantages.

We must also no forget that managers is the group of employees which receives most of a firm's training budget (Lupton, Weiss, and Peterson, 1999; Morrow, Jarrett, and Rupinski, 1997). Furthermore, even nowadays, when recession makes firms reduce their expenses in training, firms' cuts in managers´ training are smaller than for the rest of staff. This is one of the conclusions of a recent study developed by Kranz (2009) using responses from US-based organizations.

However, and in spite of the large amount of resources used, many organizations do no known the effects of training their managers. There are unanswered questions: to what extent is managers training effective? what type of training is most profitable?, how to influence different training methods in the acquisition of skills?. This lack of knowledge about the results derived from managers training is due, according to Burke and Day (1986) and Gaziel (1994), the inadequate assessment of these actions and the limited literature on the subject, claiming the necessity of empirical studies on the subject.

2.- REVIEW OF LITERATURE ON TRAINING. SPECIAL REFERENCE TO LITERATURE ON MANAGERS TRAINING.

Despite managers are considered by a large part of the literature the most valuable and scarce resource and one with a greater potential to generate competitive advantages, there are few studies that empirically analyses the relationship between managers training and organizational results. All these studies examine managers training and development and whether organizational performance increases when a company trains its employees. However the complexity of the evaluation of training and especially its influence on organizational performance is obvious in the different empirical studies carried out on the subject. This results in a lack of consistency in how variables are measured and a weak evidence of the positive impact of training on performance.

2.1. - Training measures.

Training has been usually measured in one of three ways: number of trained employees, time dedicated to training, and resources invested in training. Within the categories, the specific measure of training has varied.

Regarding the research on **training incidence**, some studies have examined the effect on performance of the number of workers involved in training by their companies (Black and Lynch, 1996; Murray and Raffaele, 1997). Other researchers have used the percentage of employees which are trained as a measure of training incidence (Aragon et al., 2003; Barrett and O'Connell, 2001; Russell et al., 1985; Tzafrir, 2006). Some studies use a simple dichotomous variable with two values depending on the intensity of the training-high (when all the operators on the line had received off-the-job training) and low (when at least some of them had received off-the-job-training) (Ichniowski , Shaw & Prennushi, 1997)- or whether the companies train their employees or not- (Barba et al., 2009).

Most of the studies which analyze the impact of **training time** on performance have used as a measure of training time the average of hours of training per employee over a particular period of time, generally one year (Aragon, Barba & Sanz, 2003; Holzer et al., 1993; Huselid, 1995; Krueger and Rouse, 1998; Lengermann, 1996; Schonewille, 2001). Other measures used in previous research for training time are: weeks of training (Lynch, 1992), days spent in formal training in the past year for each employee (Bartel, 1995), the number of hours the training programmes lasted (Connerley, 1997; Kidder and Rouiller, 1997), or the percentage of working days dedicated to training (Barrett and O'Connell, 2001).

Finally, research has also examined the effect on performance of the firm's **investment in training**. In general, this variable has been measured as training costs, which implies to deal with several problems related to the fact that firms are reluctant to provide this type of information. Studies such as Bartel (1994) and Lynch and Black (1998) have already pointed out the difficulty in obtaining monetary data about firms' investment in training. Moreover, the main limitation of using this measure is that most of firms are not sure about which expenses to include (Frazis, Gittleman, Horrigan, and Joyce, 1998; Schonewille, 2001). Authors do not agree either on what to consider training costs. For instance, according to D'arcimoles (1997), training costs should only include formal costs (as these are more objective and easier to estimate). However, Murray and Raffaele (1997) include the following: direct training costs, travel and reimbursement, consulting fees, facilities, time away from work, trainer time and fees, materials, and miscellaneous expenses. Barrett and O'Connell (2001) calculate training expenditure as a percentage of the total payroll expenses, and include an estimation of the working time that has been lost while the worker is in training. Finally, other studies include contracting external instructors, hiring installations and equipment, the documentation employed, travel, allowances and the cost associated with the administrative staff needed to carry out the training activity (Aragón et al., 2003).

Heterogeneity in variables measures is even greater when comparing studies focus on managers training. Few studies use the three described training measures (Aragon, Barba & Sanz, 2001; Barba, Aragon & Sanz, 2009), being percentage of managers trained (Aragón et al., 2001; Barba et al., 2009; Landeta et al., 2009), hours of training (Aragon et al., 2001; Barba et al., 2009); days of training (Storey, 2002; Mabey y Ramirez, 2005) and total expenditure on training (Aragón et al., 2001; Barba et al., 2009) the indicators mostly used.

However, managers training measures are frequently related to the type of training provided (Fey et al., 2000; Hunt y Baruch, 2003, Branine, 2005; Barba, Aragon & Sanz, 2007, Jones y Oswick, 2007) and the kind of method used (Aragón et al., 2001; Branine, 2005; Mabey y Ramirez, 2005, Barba et al., 2007). These variables are measured in different ways which makes particularly difficult to compare the studies results.

2.2.- Performance measures.

Research on training and organizational level outcomes also uses different performance variables. Despite there are a wide range of indicators used to measure organizational performance, there are three different levels of performance generally accepted: Human resource outcomes, Operational outcomes and financial outcomes.

Human resource outcomes are related to variables that measures improvements in employee attitudes, abilities and knowledge. It is generally assumed that this is the first step to improve organizational performance.

Most studies focus on operational outcomes as indicated by productivity (Holzer et al., 1993; Bartel, 1994; Black and Lynch, 1996; Barron and Berger, 1999; Barrett and O'Connell, 2001), sales growth (Russell et al., 1985; Bartel, 1994; Huselid, 1995; Black and Lynch, 1996; Huselid, Jackson and Schuler, 1997; Barrett and O'Connell, 2001; Ng and Siu, 2004; Ubeda García, 2005; Ghebregiorgis and Karsten, 2007), employees' salaries (Lynch, 1992; Hotchkiss, 1993; McLinden, Davis and Sheriff, 1993; Bartel, 1995; Lengermann, 1996; Krueger and Rouse, 1998; Bishop, 1990), or quality improvements (Arthur, 1994; Murray and Raffaele, 1997; Bell and Grushecky, 2006; Holzer et al., 1993). This is considered as an intermediate step towards organizational performance growth, because it should reflects improvements in human resource outcomes and contribute to increase organizational performance.

Finally, there are some studies that use financial performance (Bernthal and Wellins, 2006; D'Arcimoles, 1997; Faems, Sels, DeWinne, and Maes, 2005; Huselid, 1995; Huselid, Jackson, and Schuler, 1997), which is the top level of organizational performance.

Managers training literature focus on human resource outcomes (MacEvoy, 1997; Winterton y Winterto, 1997; Fey et al., 2000; Aragon et al., 2001; Hunt and Baruch, 2003; Branine, 2005; Barba et al., 2007; Jones and Oswick, 2007; Barba et al., 2009; Landeta et al., 2009; Bastarretxea and Albizu, 2010), what strengthen the idea that human resource outcomes is the first step to analyze organizational training impact.

Few studies consider operational performance indicators (Winterton and Winterton, 1997; Fey et al., 2000; Aragón et al., 2001; Mabey and Ramirez, 2005; Barba et al., 2007; Barba et al., 2009), and financial outcomes (Aragón et al., 2001; Storey, 2002; Barba et al., 2007; Barba et al., 2009)

However, it needs much more effort to confirm whether managers training improve operational and financial performance.

2.3.- Special reference to literature on managers training.

From their study, Coopers and Lybrand (1985) found that few companies saw any link between training and competitive success, except in so far as training was viewed as a cost which would reduce profits. In the firms surveyed, training was rarely discussed at board level, with the occasional exception of managers training. Hussey (1985) argues that managers training can positively affect the implementation of strategies. This would require the planning and evaluation of training, linking managers training schemes with business strategy, something few companies do, according to his study.

Berry (1990) argues that despite significant expenditure, few managers training programmes really affect an organization’s ability to compete. By contrast, a later Coopers and Lybrand study (1992) provided case studies of managers training in SMEs, which demonstrated a variety of benefits including increased turnover and gross margins, a more customer-oriented approach and improved ability to respond to change. Similarly, King (1993) found that 62% of organizations reported that the main benefits gained from expenditure on developing managers were improved efficiency, productivity and quality.

McEvoy (1997) evaluates the results of a managers training programme called 'Outdoor Management Education'. Through surveys and interviews with participants after training and then three years later, McEvoy found that the programme had positively affected the participants' knowledge, their commitment to the organization, their self-esteem based on their pride to work for the organization and their intentions to implement what they had learned.

Winterton and Winterton (1997) carried out a 16 case-study in United Kingdom to confirm whether competence-based management development according to established management standards improves organizational performance at two levels: human resource level and financial level. Findings demonstrate the business benefit of managers training, particularly at human resource level.

Fey et al. (2000) also found that non-technical training improve human resource outcomes as motivation, retention and capability development, however they didn't found any relation between managers training and operational performance.

Aragon et al. (2001), based on a survey of 457 European small and medium enterprises (SMEs), shows that those companies with a higher percentage of trained managers, those that had spent the most in management training and those that involved other managers developing their peers obtained better results, mainly in the areas of quality and productivity. Storey (2002, 2004) also examines the relationship between managers training and performance in SMEs, concluding that there is no evidence of a clear link between training and performance in small and medium enterprises. One of the reasons for this is that many managers take advantage of the training they have received in order to leave the SMEs and move to bigger companies.

Hunt and Baruch (2003) developed a longitudinal study with 252 executive managers from 48 European companies to evaluate to what extent interpersonal managers training affect improvements in interpersonal abilities. Results of the study showed that even training was effective; the impact of interpersonal skills training was modest and ambiguous.

Mabey and Ramírez (2005), based on surveys carried out with heads of human resources and line managers in 179 European companies, found a strong positive relationship between productivity and the extent to which line managers believe that their company is taking a serious strategic approach to management development. The results of their survey led them to suggest that investments in programmes appropriately designed for management development are positively valued by European companies in general, suggesting that the managers training model should be geared to the long term and be consistent with company strategy.

A study based on 316 Spanish firms (Barba et al., 2007, 2009) showed that managers training have a positive effect on managers abilities, involvement and innovativeness as well as financial performance, particularly when it is used more advance training techniques and long-term oriented training. Bastarretxea and Albizu (2010) also found in their Spanish case-study research positive effects of managers training; in particular managers training reduce turnover rates of managers and improve the quality of management's performance. However, Landeta et al. (2009), with 326 Spanish companies, found clear absence of relationship between management turnover and the readiness of a company to opt for ongoing training.

2.4.- Conclusions.

Although the literature suggests that firms that train more are likely to achieve better performance, empirical studies have not provided evidence of the returns of training. As a general rule, training has a positive effect on productivity (Bishop, 1990, Kidder and Rouiller, 1997, Barron and Berger, 1999, Faems et al., 2005), sales growth (Russell et al., 1985, Huselid, 1995, Barrett and O'Connell, 2001), employees' salaries (Lynch, 1992, Hotchkiss, 1993, Bartel, 1994, Lengermann, 1996) and quality (Holzer et al., 1993, Kidder and Rouiller, 1997, Murray and Raffaele, 1997). However, training is found to be only very weakly related to financial performance (Tharenou *et al.*, 2007). A few studies even show that training is negatively related to some results (i.e. Ghebregiorgis and Karsten, 2007, Wright et al., 1999). In fact, Hitt et al. (2001) find that training investment first generates a negative effect on results (produced by the costs of the training), which later becomes positive, as knowledge is transferred to the workplace.

Focusing on managers training we find similar conclusions. Despite there some studies that have found empirical support to a positive impact of managers training on organizational performance, there is still a lack of evidence of generalized improvements in organizational performance, particularly at operational and financial level, when companies train their managers. It is necessary to make progress in longitudinal methodology that leads us to a better understanding of managers training drivers and effect.

3.- RESEARCH PROJECT PROPOSAL.

From the literature review, we can conclude that although there is an increasing recognition of the benefits of training investments, both in the organizations and in the literature, it is difficult to find empirical studies providing strong evidence of the effect of training on firm's performance. As a consequence, practitioners are sometimes sceptical about spending money on training. Furthermore, when a company has to cut back on expenses, one of the first things to go is usually budget for training. This has been the situation in many European firms as a result of the global economic crisis. One of the biggest dangers of such action is that it may lead to a decline of employees' skills and productivity. That is why, today is more important than ever to analyze in deep the relation between training and performance. More important, due to financial pressures, companies should use their training expenses efficiently; they should offer high-impact training initiatives. Then, there is also a need of identifying how to increase the impact of training investments.

This project focuses on managers training, since managers play a key role in a company's success. They are strategic employees; therefore, training investments in managers are a priority. In this line, the recent study developed by Kranz (2009), using responses from US-based organizations, shows that even nowadays, when recession makes firms reduce their expenses in training, firms' cuts in managers´ training are smaller than for the rest of staff.

Despise the importance of managers training, few studies on the relation between training and performance have focused on managers. The present research project proposal tries to fill this gap in the research. This section explains the research project methodology including purpose, population and sample, data collection, statistical data analysis, participants, work plan, expected results, dissemination of results and estimated work hours.

3.1.- Research purpose and progress beyond the state-of-the-art.

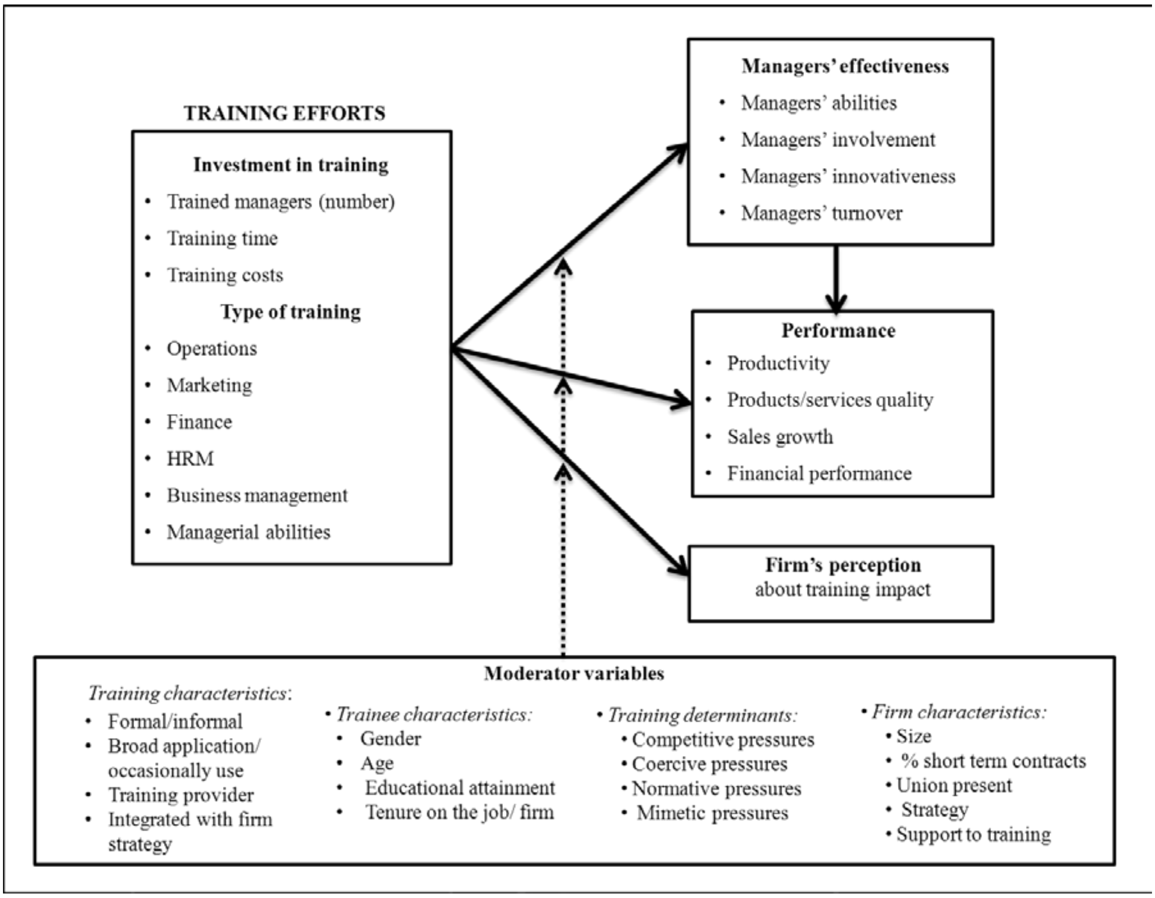
This project seeks to analyze the relation between managers training and firm's performance in the European context.

The main research questions of this project are the following ones:

- Does training managers pay off?
- How training contributes to company´s success? That is to say, which performance measures improve with training managers programs?
- What specific managers training programs (in terms of the types of competence offered) have a greater impact on the firm?
- How can firms enhance the effect of managers training on their performance? What are the main determinants of effective training investments? (i.e. characteristics of the training offered, firm characteristics and firm support to training actions, trainee characteristics, …)
- Are there any differences between European countries in the role of managers training in the firms and its impact on firm performance?

Figure 1 summarizes these research questions and the model this project proposes to examine.

Figure 1: Impact of managers training in the company outcomes model.



Testing this model would contribute to the literature on the training-performance relationship and would guide firms and training suppliers in their decisions about how to increase the impact of their managers training programs.

Focusing on the European context would be another contribution of this study, since most of the studies on the relation between training and performance have been develop for the U.S. context.

To analyze the relationship between managers training and firm performance, and to answer above-mentioned questions, we propose developing a project research which methodology is described below.

3.2.- Research method.

The main limitation of most of the previous studies on the relation between training and performance is their cross-sectional design. This design does not allow them neither to analyze the effect of training on organizational performance over time nor to go into the causality of the relationships between training and performance. In order to avoid this limitation, we propose to conduct a longitudinal study. In particular, the objective of this project is to obtain a panel data with European firms along 5 years.

It is important to note that a recognized problem in mounting longitudinal surveys concerns the costs and difficulties in maintaining response rates over time. We would try to avoid this problem, inviting firms to take part in this study and offering them both an annual report and a final report of our findings.

In addition, we suggest completing the quantitative research described above with a qualitative research based on interviews to a panel of experts on training. This research would be useful to interpret the results of the quantitative analysis and to identify the determinants of effective managers training programs.

3.2.1.- Quantitative research: sample.

The sample would include firms located in the European countries in which EQUAL operates (United Kingdom, Spain, Italy, France, Lithuania, The Czech Republic, Slovenia, Sweden, Belgium, Poland, Norway, Russia, Finland and The Netherlands) as well as other European countries which may be interesting, in particular, Germany, Portugal and Romania.

The project would be designed to reach across industries and include a representative sample of the companies in above-mentioned countries. We suggest focusing on firms over 200 employees. Firm’s size is important as small companies do not usually has human resource management departments nor develop formal human resource management policies.

The sampling frames in each country should be designed to produce representative samples. In order to do this, partners in each country should base on general accepted data base of the largest companies in the country. For instance, for the Spanish case, we would use the DIRCE (Central directory of firms) of the INE (Statistics National Institute of Spain). According to this data base, in Spain there were 5078 firms over 200 employees in 2009 (last data). Then, for a confidence level of 95% and a confidence interval of (+/-) 5, the sample required to be representative would include 357 firms. In any case, a minimum of 100 usable surveys must be obtained in each country.

As sampling method, we suggest to use the stratified sampling, having into account the sector the firms belong to.

3.2.2.- Quantitative research: data collection.

The information would be collected using a structured questionnaire. The questionnaire would be divided into four parts: general characteristics of the firm (some of them will be used as control variables); information about the training actions in the firm and the degree in which firm supports training; performance data; and opinion of the respondents about the usefulness of managers training for improving firm running and performance.

The items within the questionnaire would be derived from a comprehensive review of the literature on the relation between training and performance. Next, it would be revised upon discussions with a network of academics with expertise in this topic and with practitioners.

The questionnaire would be developed in English and then translated into the national local language where appropriate. Translations of questions are slightly amended between national questionnaires to capture the nuances in meaning between languages. The questions would be translated into the national language by a translator with some familiarity with HR and then translated back into English by a different translator. Any differences would be discussed in order to capture the universal international comparative meaning of the terms as closely as possible.

Based on a random sample of firms in each country, firms would be contacted to asses their willingness to participate in the project. Once the firms agree to participate, the survey would be conducted using personal interviews. The respondent should be the person with responsibility for human resource management in the firm.

The data collection in each country would be under the responsibility of one country partner. They should also generate the data base with their own country data. The coordinator team of the project would check the data obtained in order to develop a clean data file.

Since we suggest a longitudinal study for analyzing the relationship between training and performance, the survey would be repeated during the following four years in order to develop a panel of data.

In order to improve the likehood of obtaining a representative response rate, we suggest that the collection of data is conducted by a consulting firm which operate in all of the countries this project focuses on.

3.2.3.- Quantitative research: data analysis.

First, descriptive analysis would be performed, both for each country and for the whole sample. Second, we would performance different statistics analyses in order to study the association between training and firm’s performance and identifying the main determinants of effective training investments. These analyses would include regression analysis and structural model equation. Finally, we would provide a comparative analysis on the role of training and its impact on firm performance in the countries included in the sample.

3.2.4.- Qualitative research

In order to evaluate in-depth the data obtained using the survey, we suggest conducting a qualitative research each year. In particular, we propose to create a panel of experts in each country and discuss with them the results of the quantitative research.

The panel of experts should include a number of 4-10 HRM managers of firms over 200 employees or HRM consultants with experience in projects with this type of firms.

The partners in each country would be responsible of creating the panel of experts and organizing the meeting with them. The meeting would be conducted following a protocol designed by the coordinator team of the project. Each meeting should be taped recorded and later transcribed.

3.3.- Participants.

The success of the project would require the participation of one partner in each of the participant's countries and a coordinator.

The coordinator of the project will be the Spanish team. It would be constituted on the one hand by AEEDE Director, José Luis Bozal, and his assistants, and on the other hand by a research team of University of Murcia. The university team is experienced in the research on the relationship between training and performance and has worked on European projects directly related to the issues raised.

Partners should have conducted research on human resources issues. Preference would be given to academics at highly reputable universities within their countries or prestigious consultant firms which operate in the countries the project focuses on.

Partners' responsibilities

The partners in each country would be in charge of the following issues:

1. Translating the questionnaire from English to their native language
2. Designing a representative sample of large firms in their country
3. Contacting the firms in the sample and collecting data
4. Sending data to the responsible of the project, the Spanish team.
5. Reviewing and interpreting the country-specific results of the project.
6. Conducting a meeting with a panel of experts in training in their countries and transcript the information obtained in that meeting.

The Spanish team would be in charge of above-mentioned tasks in Spain and of the overall coordination. It would be responsible of:

1. Creating the network of partners for the project.
2. Providing the partners with the questionnaire in English and the methodology to follow both for avoiding bias in the translation process and for collecting data.
3. Analyzing the data of the whole sample
4. Disigning the qualitative research protocol
5. Elaborating both annual reports and a final report.
6. Disseminating findings.

3.4.- Work plan.

The research study would involve some stages. Figure 2 shows them.

Stage 1: The Spanish team would select partners in each country.

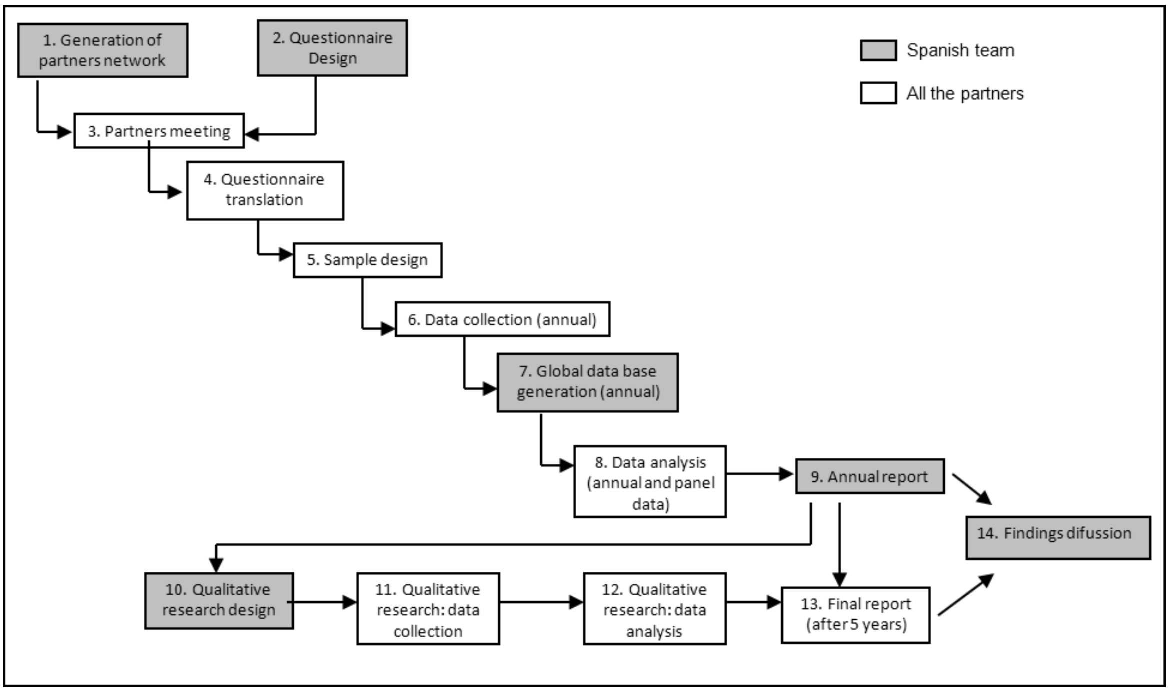
Stage 2: The Spanish team would elaborate the questionnaire for the survey in English.

Stage 3: The network of partners in each project country meets physically to discuss important issues regarding the survey. This guarantees a monitoring of the quality of the survey and of the comparability of the outcomes.

Stage 4: Partners in each country would translate the questionnaire provided by the Spanish team into their native language

Stage 5: Partners in each country would design a representative sample of firms over 200 employees in each country. The Spanish team would guide this process.

Figure 2. Work plan of the project research



Stage 6: All the partners would collect data from annual survey.

Stage 7: The Spanish team would elaborate de data file containing the information for all the countries which participates in the project.

Stage 8: The Spanish team would analyse the data from the survey. Partners in each country will be required to review it and interpret country-specific results.

Stage 9: The Spanish team would elaborate an annual report including conclusions for each country, for the whole data and a comparative analysis between the countries in the project.

Stage 10: The Spanish team would design the methodology for the qualitative research.

Stage 11: The partners would conduct the qualitative research and would give the information obtained to the Spanish team.

Stage 12: The partners would analyse qualitative data.

Stage 13: The Spanish team would elaborate a final report, including conclusions for both, quantitative and qualitative researches.

Stage 14: The Spanish team would disseminate findings of the project.

From the second to the fifth year of the project, stage 6 to 12, as well as stage 14 should be repeated.

3.5.- Expected results

The specific results this project seeks to reach are the following ones:

1. Development of a network of expertise in training
2. From the five survey rounds, this study would obtain a panel data with information about managers training in a group of European firms.
3. The study seeks to provide evidence about whether training a manager pays off and identify the main determinants of training outcomes. Then, this project would offer recommendations about how to improve the benefits of training investments.
4. The findings of this project would be included in reports (5 annual reports and a final report from the analysis of the whole panel data and the qualitative research) which will be provided to EQUAL and would be disseminated in conferences and publications in both practitioners and academics journals.

The project's target audience is mainly firms and training suppliers. On the one hand, our findings would help firms to develop more effective managers training programs. On the other, they would help training suppliers, in particular Business Schools, in the design of their "in company" training programs. In addition, this project may create a network of expertise in training which will enhance future research and collaboration on this issue.

3.6.- Dissemination of results.

The dissemination strategy of the project results we propose includes different measures for disseminating both annual findings and the findings of the five years data panel analysis:

- Events: conferences, workshops across Europe, such as EURAM Conference, Workshop on Strategic Human Resource Managemet (EIASM) or International Workshop on HRM.
- Academy journals: *International Journal of Human Resource Management, Human Resource Management, Personnel Review, International Journal of Training and Development*, etc.
- Professional journals. We suggest including practitioners journals in each country in which the project is developed. For instance, in Spain this would include publications in *Universia Business Review*, *Capital Humano*, etc.
- High-Level seminars in the universities the network of partners belong to.
- Presentations to EQUAL association.
- Presentation to the professional associations of human resource managers in each project countries. For instante, in Spain it is *Aedipe*.
- Companies reports. We would provide reports to those companies in the sample that ask us for them
- Etc.

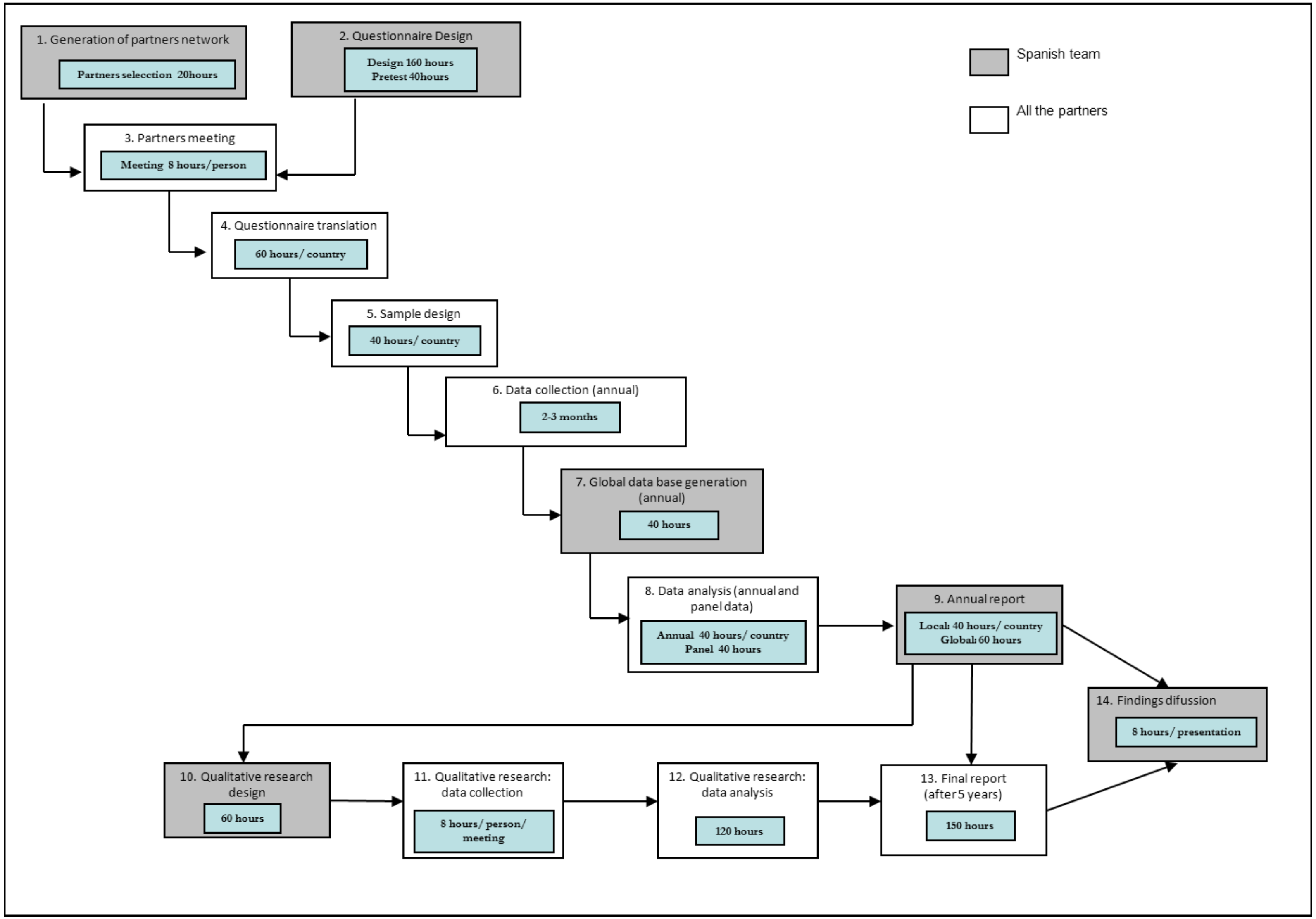
3.7.- Estimated work hours.

The research study would involve the following estimated work hours. Figure 3 shows them.

The work hours have been estimated with the premise that the collection of data will be conducted by a consulting firm which operate in all of the countries this project focuses on.

We should note that from the second to the fifth year of the project, stage 6 to 12, as well as stage 14 should be repeated and that travel hours are not included.

Figure 3. Estimated work hours of the project research



3.8.- Budget.

The project will be held in 5 European countries for a period of 5 years, working with a sample of 300 companies per country. The total estimated budget is:

Total budget: 2,6 M €

- Year 1: 533.000 €
- Year 2: 469.000 €
- Year 3: 469.000 €
- Year 4: 469.000 €
- Year 5: 660.000 €

4. REFERENCES

Acquaah M (2003) Corporate management, industry competition and the sustainability of firm abnormal profitability, *Journal of Management and Governance* 7(1): 57–85.

Aguinis, H., & Kraiger, K. (2009) Benefits of training and development for individuals and teams, organizations, and society. *Annual Review of Psychology*, 60: 451-474.

Alavi, M., & Leidner, D. E. (2001) Review: knowledge management and knowledge management systems: conceptual foundations and research issues. *MIS Quarterly*, 25: 107-136.

Alliger, G. M., Tannenbaum, S. I., Bennett, W., Traver, H., & Shotland, A. (1997) A meta-analysis of the relations among training criteria. *Personnel Psychology*, 50: 341-358.

Amit, R. y Schoemaker, P.J.H. (1993): "Strategic assets and organizational rent", *Strategic Management Journal*, vol. 14, pp. 33-46.

Aragón A, Barba I & Sanz R (2001) Efectividad y rentabilidad de la formación de directivos. *XI Congreso Nacional de ACEDE*. Zaragoza, September.

Aragón, A., Barba, M. I., & Sanz, R. (2003) Effects of Training on Business Results. *The International Journal of Human Resource Management*, 14: 956-980.

Arthur, J. B. (1994) Effects of human resource systems on manufacturing performance and turnover. *Academy of Management Journal*, 37: 670-687.

Bae, J., & Lawler, J. J. (2000) Organizational and HRM strategies in Korea: Impact on firm performance in an emerging economy. *Academy of Management Journal*, 43: 502-519.

Baldwin, T.T. y Ford, J.K. (1988): Transfer of training: a review and directions for future research. *Personnel Psychology*, 41, 63-106.

Barba, M.I., Aragón, A. & Sanz, R. (2007) Prácticas de formación y resultados organizativos. *Revista Europea de Dirección y Economía de la Empresa*, 16 (4), 127-144.

Barba. M.I., Aragón, A. & Sanz, R. (2009) La formación de los directivos y su efecto en los resultados. *XIX Congreso Nacional de ACEDE*. Toledo, September

Barney, J. B. (1991) Firm resources and sustained competitive advantage. *Journal of Management*, 17: 99-120.

Barney, J. B., & Wright, P. M. (1998) On becoming a strategic partner: the role of human resources in gaining competitive advantage. *Human Resource Management*, 37: 31-46.

Barrett, A., & O'Connell, P. J. (2001) Does training generally work? The returns to in-company training. *Industrial & Labor Relations Review*, 54: 647-663.

Barron, J.M.; Berger, M.C. y Black, D.A. (1997) How well do we measure training?, *Journal of Labor Economics*, 15, 507-528.

Bartel, A. P. (1994) Productivity Gains from the Implementation of Employee Training Programs. *Industrial Relations*, 33: 411-425.

Bartel, A. P. (1995) Training, wage growth, and job performance: evidence from a company database. *Journal of Labor Economics*, 13: 401-425.

Basterretxea, I & Albizu, E. (2010) Management training as a source of perceived competitive advantage: The Mondragon Cooperative group case. *Economic and Industrial Democracy*. Published online DOI: 10.1177/0143831X10377809.

Bell, J., & Grushecky, S. (2006) Evaluating the effectiveness of a logger safety training program. *Journal of Safety Research*, 37: 53-61.

Bernthal, P., & Wellins, R. (2006) Trends in leader development and succession. *Human Resource Planning*, 29: 31-40.

Berry, J. K. (1990). Linking Management Development to Business Strategies. *Training and Development Journal*, 44(8), 20–22.

Birdi, K., Clegg, C., Patterson, M., Robinson, A., Stride, C. B., Wall, T. D. (2008) The impact of human resource and operational management practices on company productivity: A longitudinal study. *Personnel Psychology*, 61: 467-501.

Bishop, J. H. (1990) Job Performance, turnover, and wage growth. *Journal of Labor Economics*, 8: 363-386.

Black, S., & Lynch, L. (1996) Human capital investments and productivity. *American Economic Review*, 86: 263-267.

Bollinger, A. S., & Smith, R. D. (2001) Managing organizational knowledge as a strategic asset. *Journal of Knowledge Management*, 5: 8-18.

Branine, M. (2005) Cross-cultural training of managers. *The Journal of Management Development*, 22, 459-472.

Burke M.J. and Day R.R. (1986) A cumulative study of the effectiveness of managerial training. *Journal of Applied Psychology* 71, 232–245.

Castanias RP & Helfat CE (1991) Managerial resources and rents. *Journal of Management* 17(1), 155–171.

Castanias RP & Helfat CE (2001) The managerial rents model: Theory and empirical analysis. *Journal of Management* 27, 661–678.

Chen, Z, Takeuchi, N & Wakabayashi, M. (2005): Managerial skill utilization: work environment, gender, and training incentive, International Journal of Human Resource Management, 16, 786-808.

Collins, C. J., & Clark, K. D. (2003) Strategic human resource practices, top management team social networks, and firm performance: The role of human resource practices in creating organizational competitive advantage. *Academy of Management Journal*, 46: 740-751.

Connerley, M. L. (1997) The influence of training on perceptions of recruiters´ interpersonal skills and effectiveness *Journal of Occupational & Organizational Psychology*, 70: 259-273.

Coopers & Lybrand Associates (1985) *A Challenge to Complacency: Changing Attitudes to Training*. MSC/NEDO, London.

Coopers & Lybrand Associates (1992) *Meeting the Management Challenge*. CLA, London.

Cuervo A (1993) El papel de la empresa en la competitividad. *Papeles de Economía Española* 56: 363–378.

Danvila-del Valle, I., Sastre-Castillo, M. A., & Rodríguez-Duarte, A. (2009) The effects of training on performance in service companies. A data panel study. *International Journal of Manpower*, 30: 393-407.

D'Arcimoles, C. H. (1997) Human resources policies and company performance: a quantitative approach using longitudinal data. *Organization Studies*, 18: 857-874.

Delery, J. E., & Doty, D. H. (1996) Modes of theorizing in strategic human resource management: tests of universalistic, contingency and configurational performance predictions. *Academy of Management Journal*, 39: 802-835.

Denrell J, Fang C, Winter SG. 2003. The economics of strategic opportunity. *Strategic Management Journal*, October Special Issue 24: 977–990.

Faems, D., Sels, L., DeWinne, S., & Maes, J. (2005) The effect of individual HR domains on financial performance. *The International Journal of Human Resource Management*, 16: 676-700.

Frazis, H., Gittleman, M., Horrigan, M., & Joyce, M. (1998) Results from the 1995 survey of employer-provided training. *Monthly Labor Review*, 121: 3-13.

Frey, R., S. (2001) Knowledge management proposal development, and small business. *Journal of Management Development*, 20: 38-54.

Galán JL & Vecino J (1997) Las fuentes de rentabilidad de las empresas. *Revista Europea de Dirección y Economía de la Empresa* 6(1): 21–36.

Gernstein M & Reisman H (1983) Strategic selection: Matching executives to business conditions. *Sloan Management Review* 24(2): 33–

Ghebregiorgis, F., & Karsten, L. (2007) Human resource management and performance in a developing country. *The International Journal of Human Resource Management*, 18: 321-332.

Goldstein, I.L. (1993) *Training in organizations*, Brooks/ Cole Publishing Company, California.

Gupta A. & Govindarajan V. (1984) Business unit strategy, managerial characteristics, and business unit effectiveness at strategy implementation. *Academy of Management Journal* 27(1): 25–41.

Guthrie J.P., Grimm C.M. & Smith K.G. (1991) Environmental change and management staffing: An empirical study. *Journal of Management* 17, 735–748

Hansen MH, Perry LT, Reese CS. 2004. A Bayesian operationalization of the resource-based view. *Strategic Management Journal* 25, 1279–1295.

Hitt, M.A.; Bierman, L.; Shimizu, K. y Kochhar, R. (2001) Direct and moderating effects of human capital on strategy and performance in professional service-firms: a resource-based perspective. *Academy of Management Journal*, 44 (2), 13-28.

Holcomb, T.R., Holmes, R.M. & Connelly, B.L. (2009) Making the most of what you have: managerial ability as a source of resource value creation. *Strategic Management Journal*, 30, 457-485.

Holzer, H., Block, R., Cheatham, M., & Knott, J. (1993) Are training subsides for firms effective? The Michigan experience. *Industrial & Labor Relations Review*, 46: 625-636.

Hotchkiss, L. (1993) Effects of training, occupation, and training-occupation match on wage. *The Journal of Human Resources*, 28: 482-497.

Huber, G. P. (1991) Organizational learning the contributing processes and the literatures. *Organization Science*, 2: 88-115.

Huint, P & Saks, A.M. (2003) Translating training science into practice: a study of manager's reactions to posttraining interventions. *Human Resource Development Quarterly*, 14, 181-198.

Hunt, J.W. & Baruch, Y. (2003) Developing top manager: the impact o interpersonal skills training. *The Journal of Management Development*, 22, 729-752.

Huselid, M. A. (1995) The impact of human resource management practices on turnover, productivity and corporate financial performance. *Academy of Management Journal*, 38: 635-672.

Huselid, M. A., Jackson, S. E., & Schuler, R. S. (1997) Technical and strategic human resource management effectiveness as determinants of firm performance. *Academy of Management Journal*, 40: 171-188.

Hussey D.E. (1985) Implementing corporate strategy: Using management education and training. *Long Range Planning* 18(5), 28-37.

Ichniowski, C., Shaw, K., & Prennushi, G. (1997) The effects of human resource management practices on productivity: a study of steel finishing lines. *The American Economic Review*, 87: 291-313.

Jones, P.J. & Oswick, C. (2007) Inputs and outcomes of outdoor management development: of design, dogma and dissonance. *British Journal of Management*, 18, 327-341.

Kamoche, K. (1996) Strategic human resource management within a resource-capability view of the firm. *Journal of Management Studies*, 33: 213-233.

Kamoche, K., & Mueller, F. (1998) Human resource management and the appropriation-learning perspective. *Human Relations*, 51: 1033-1060.

Kidder, P. J., & Rouiller, J. Z. (1997) Evaluating the Success of a Large-Scale Training Effort. *National Productivity Review*, Spring: 79-89.

Kim, D. H. (1993) The link between individual and organizational learning. *Sloan Management Review*, 33: 37-50.

King, S. (1993). 'Business Benefits of Management Development', *Management Development Review*, **6**(4), pp. 38–40.

Kor Y.Y. (2003) Experience-based top management team competence and sustained growth. *Organization Science* 14, 707–719.

Kraiger, K. (2003). Perspectives on training and development. 171-192 in W.C. Borman, D.R. Ilgen, & R.J. Klimoski (Eds.), *Handbook of psychology: Industrial and organizational psychology*. Hoboken, NJ: John Wiley & Sons Inc.

Kraiger, K., McLinden, D., & Casper, W. J. (2004) Collaborative planning for training impact. *Human Resource Management*, 43: 337-351.

Kranz, G. (2009). Study: training more targeted amid downturn. *Workforce Management*, 88(12): 6.

Krueger, A., & Rouse, C. (1998) The impact of workplace education on earnings, turnover, and job performance. *Journal of Labor Economics*, 16: 61-94.

Lado, A.A. y Wilson, M.C. (1994) Human resource systems and sustained competitive advantage: A competency-based perspective. *Academy of Management Review*, 19, 699-727.

Landeta, J., Barrutia, J., & Hoyos, J. (2009) Management turnover expectations: a variable to explain company readiness to engage in continuous management training. *The International Journal of Human Resource Management*, 20: 164-185.

Lang, J. C. (2001) Managerial concerns in knowledge management. *Journal of Knowledge Management*, 5: 43-57.

Lee, C. C., & Yang, J. (2000) Knowledge value chain. *Journal of Management Development*, 19: 783-793.

Lengermann, P. A. (1996) The benefits and costs of training: a comparison of formal company training, vendor training, outside seminars, and school based training. *Human Resource Management*, 35: 361-381.

Lippman SA, Rumelt RP. 2003. The payments perspective: micro-foundations of resource analysis. *Strategic Management Journal*, October Special Issue **24**: 903–927.

Lupton, R. A., Weiss, J. E., & Peterson, R. T. (1999) Sales Training Evaluation Model (STEM): A conceptual framework. *Industrial Marketing Management*, 28: 73-86.

Lynch, L. M. (1992) Private-sector training and the earnings of young workers. *The American Economic Review*, March: 299-312.

Lynch, L. M., & Black, S. E. (1998) Beyond the incidence of employer-provided training. *Industrial & Labor Relations Review*, 52: 64-81.

Mabey C & Ramírez M (2005) Does management development improve organizational productivity? A six-country analysis of European firms. *International Journal of Human Resource Management* 16, 1067–1082.

Macduffie, J. P., & Kochan, T. A. (1995) Do U.S. Firms Invest Less in Human Resources? Training in the World Auto Industry. *Industrial Relations*, 34: 147-168.

Mahoney JT (1995) The management of resources and the resource of management. *Journal of Business Research* 33(2) 91–101.

Mahoney JT & Pandian JR (1992) The resource-based view within the conversation of strategic management. *Strategic Management Journal* 13(5): 363-380.

Makadok R. (2001) Toward a synthesis of the resource based and dynamic-capability views of rent creation. *Strategic Management Journal*, 22, 387–401.

McEvoy GM (1997) Organizational change and outdoor management education. *Human Resource Management* 36(2): 235–250

McGill, M. E., & Slocum, J. W. (1993). Unlearning the organization. *Organizational Dynamics*, 22(2): 67-79.

McLinden, D. J., Davis, M. J., & Sheriff, D. E. (1993) Impact on financial productivity: a study of training effects on consulting services. *Human Resource Development Quarterly*, 4: 367-375.

Miller D. (2003) An asymmetry-based view of advantage: towards an attainable sustainability. *Strategic Management Journal*, October Special Issue 24: 961–976.

Morrow, C. C., Jarrett, M. Q., & Rupinski, M. T. (1997) An investigation of the effect and economic utility of corporate-wide training. *Personnel Psycology*, 50: 91-119.

Mueller, F. (1996) Human resources as strategic assets: an evolutionary resource-based theory. *Journal of Management Studies*, 33: 757-785.

Murray, B., & Raffaele, G. C. (1997) Single-site, results-level. Evaluation of Quality awareness training. *Human Resource Development Quarterly*, 8: 229-245.

Neupert, K.E., Baughn, C.C. & Lam Dao, T.T. (2005) International management skills for success in Asia. *Journal of European Industrial Training*, 29 (2), 165-180.

Ng, Y. C., & Siu, N. Y. M. (2004) Training and enterprise performance in transition: evidence from China. *International Journal of Human Resource Management*, 15: 878-894.

Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation.* Oxford: Oxford University Press.

Pffefer J (1998) *The Human Equation*. Boston, MA: Harvard Business School Press.

Pickett, L. (1998) Competencies and Managerial Effectiveness: Putting Competencies to Work, *Public Personnel Management*, 27, 103–115.

Raghuram, S. (1994) Linking Staffing and Training Practices with Business Strategy: A Theoretical Perspective. *Human Resource Development Quarterly*, 5: 237-251.

Russell, J. S., Terborg, J. R., & Powers, M. L. (1985) Organizational performance and organizational level training and support. *Personnel Psychology*, 38: 849-863.

Schonewille, M. (2001) Does training generally work? Explaining labour productivity effects from schooling and training. *International Journal of Manpower*, 22: 158-172.

Senge P (1990) *The Fifth Discipline: The Art and Practice of the Learning Organization*. London: Century Business.

Storey D.J. (2004) Exploring the link, among small firms, between management training and firm performance: A comparison between the UK and other OECD countries. *International Journal of Human Resource Management* 15(1): 112–130.

Tharenou, P., Saks, A. M., & Moore, C. (2007) A review and critique of research on training and organizational-level outcomes. *Human Resource Management Review*, 17: 251-273.

Thomke S, Kuemmerle W. 2002. Asset accumulation, interdependence and technological change: evidence from pharmaceutical drug discovery. *Strategic Management Journal* 23, 619–635.

Tzafrir, S. S. (2006) A universalistic perspective for explaining the relationship between HRM practices and firm performance at different points in time. *Journal of Managerial Psychology*, 21: 109-130.

Ubeda García, M. (2005) Training and business performance: The Spanish case. *International Journal of Human Resource Management*, 16: 1691-1710.

Ulrich, D., Jick, T., & Von Glinow, M. (1993). High impact learning: Building and diffusing learning capability. *Organizational Dynamics*, 22(3): 52-66.

Winterton, J & Winterton, R. (1997) Does management develompment add value?. Britihs Journal of Management, 8, S65-S76.

Wright, P. C., & Geroy, G. D. (2001) Changing the mindset. *International Journal of Human Resource Management*, 12: 586-600.

Wright, P. M., McCormick, B., Sherman, W. S., & McMahan, G. C. (1999) The role of human resource practices in petro-chemical refinery performance. *International Journal of Human Resource Management* 10: 551-571.

Wright, P. M., McMahan, G. C., & McWilliams, A. (1994) Human resources and sustained competitive advantage: a resource-based perspective. *International Journal of Human Resource Management*, 5: 301-326.

ANNEX

TABLE 1.
EFFECTS OF MANAGERS' TRAINING ON PERFORMANCE

TABLE 1. EFFECTS OF MANAGERS' TRAINING ON PERFORMANCE.

PAPER	STUDY TIPE	SAMPLE	HYPOTHESIS	STADISTICAL ANALYSIS	TRAINING VARIABLES	PERFORMANCE VARIABLES	CONCLUSIONS	LIMITATIONS
Winterton & Winterton 1997	Case-study (UK)	16 SME´s	H1: Competence-based management development improves individual performance H2: CBMD improves organizational performance H3: CBMD improves Business performance H4: improvements in IP, OP and BP are more likely if CBMD is linked to organizational strategy H5: improvements are more likely if HRD processes are base don a common, coherent integrated set of competent statements	Correlations	Competence-based management training according to Management development standards.	Individual performance: commitment, motivation, efficiency Organizational performance: Team performance, use of teams, lower rates of accidents Business performance: Return on staffing, market share, share prices	H1,H2, H3: Positive and highly significant results which demonstrate the business benefit of competence-based management training. H4: The results provide support for this conditional hypothesis, so Management development is more likely to improve performance when it is linked with organizational strategy. H5: Management training is more likely to improve performance when Human resource development systems and processes are based on competence-based training.	Case-study approach
Fey et al., 2000	Cross-sectional (Russia)	101 foreign capital companies	H1/2: Emphasis on providing technical/non-technical training is positively related to HR outcomes and firm performance	Regression analysis	Training indicator (subjective): *Technical training *Non-technical-training	-HR outcome indicators: motivation, retention and capability development -Performance indicator (subjective): managers perception of performance evolution over the five past years	- Non-technical training is only positively related to HR outcomes improvements, but there is no relation to performance.	-Cross-sectional design -Single source
Aragón et al. 2001	Cross-sectional (United Kingdom, Netherlands, Portugal, Finland and Spain)	457 companies between 10 and 250 employees	H1: investment in managers training positive effect on effectiveness H2: investment in managers training positive effect on profitability	Regression analysis	-training methods -training characteristics -training activities - percentage of managers trained -hours of training -% hours of training during the day -total expenditure on training -% subsidized expenditure -managers as instructors or not	* Effectiveness (subjective): -productivity -involvement of managers -human resources indicators -quality * Profitability: - sales volume - profit before interest and taxes - profitability	H1: more investment in managers training better results of productivity and quality. H2: greater spending managers training increased sales volume.	Sample: SMEs (less developed HR management) Data from five different countries (heterogeneity of data)

PAPER	STUDY TIPE	SAMPLE	HYPOTHESIS	STADISTICAL ANALYSIS	TRAINING VARIABLES	PERFORMANCE VARIABLES	CONCLUSIONS	LIMITATIONS
Storey, 2002	Cross-sectional (UK)	314 medium companies	H1: economic performance is only weekly influenced by training and development policies and practices	- correlation - probit model	*Average days of training per year	*Rate of return on capital, compared with the industry average *Rate of return on sales *Cash-Flow *Profitability of previous years	*Mixed results. Different impact of policies and practices on performance indicators. It is difficult to provide an explanation of the improvements training and development have on performance of medium-sized firms	Cross-sectional design
Huint & Sacks, 2003	Cross-sectional (Canada)	174 managers and students	will managers react more positively to: H1: a relapse prevention or to a supervisor support post training transfer intervention (post training transfer intervention main effect)? H2: utility analysis or to research information when describing the effectiveness of post training transfer interventions (information main effect)? H3: a post training transfer intervention when it is described in utility analysis terms versus research evidence (post training transfer intervention*information interaction effect)?	- analysis of variance (ANOVA)	- post training interventions designed to facilitate the transfer of training: - goal-setting - self-management - relapse-prevention	- managers' preferences regarding the decision to adopt the consultant's recommendations	H1: the post training transfer main effect was not significant H2: not find support H3: not find support	Laboratory methodology used: caution is required when generalizing the results (validity of the findings)

PAPER	STUDY TIPE	SAMPLE	HYPOTHESIS	STADISTICAL ANALYSIS	TRAINING VARIABLES	PERFORMANCE VARIABLES	CONCLUSIONS	LIMITATIONS
Hunt & Baruch 2003	Longitudinal (UK)	252 executives from 48 organizations	H1: The impact of interpersonal skills training on subsequent skill performance hill improve the effectiveness of skills H2: the impact of interpersonal skills training on subsequent skill performance Hill be positive but modest H3: The impact of interpersonal skills training on subsequent skill performance will vary across different skills.	t-test comparisons	Attendance of interpersonal skills program	Four interpersonal skills categories: Structuring, motivating, assessing/rewarding, leading.	H1: Results suggest that training has been proven to be effective. H2: The impact of interpersonal skills training is modest. H3: The impact by skill is variable. Interpersonal skills training enhance certain skills, but not all skills are affected by training in the same way. Soft and feely skills are less responsive to training.	
Storey 2004	Descriptive	Small and medium firms (UK)	No hypotheses		Formal external training		There is very weak evidence that small firms providing formal external training perform better than those that do not.	Evidence of a single country.
Branine 2005	Qualitative research (China)	45 senior managers who had participated in a United Nation Development Program for the training of Chinese managers	There are not hypotheses. The research evaluates that training programs	-	Managers perception of: - content of training and its transferability to Chinese organizations - learning and training methods - western tutors	Implementation in their organizations of what they have learn from the program s	When designing management development program, he cultural context in which managers were brought up and taught to think and operate should be taken into account. Otherwise, these programs will not be successful. The programs evaluated in this paper was designed to provide Chinese managers with western management competences, but it fails (nothing had been translated into the Chinese companies) because the cultural obstacles	
Chen et al. 2005	Cross-sectional (China)	205 managers from 12 Chinese SOCs (stated-owned corporations) in 3 Chinese cities (general machinery manufacturing industry)	H1 and H2 non related to training. H3 partially related to it.	Regression analysis	Dependent variable: Managerial skill utilization Independent variables: - environment for managerial development - training-performance-based promotions - gender		The interactions between the three independent variables do affect on managerial skill utilization: the utilization of managerial skills for female managers is more likely to be guided by the perceived environment for managerial development while for male managers, it is generally reinforced y strong training incentives connected to promotion.	All measures based on self-reported data Generalization of findings: Chinese context and only three cities

PAPER	STUDY TIPE	SAMPLE	HYPOTHESIS	STADISTICAL ANALYSIS	TRAINING VARIABLES	PERFORMANCE VARIABLES	CONCLUSIONS	LIMITATIONS
Mabey & Ramirez 2005	Cross-sectional (Europe)	179 private European firms	H5: Positive relationship between organizational productivity and the amount of management development provided and diversity of MD methods used by an organization.	Regression analysis	Training indicator: *Days of training per year *Methods used	Productivity	*Managers training doesn´t improve productivity	Small and non-representative sub-sample of a large study Cross-sectional design
Neupert et al. 2005	Cross-sectional (Vietnam)	74 managers	There are not hypotheses. The research identifies skills necessary in order to succeed in international business. The paper proposes a training program to develop such skills	Descriptive analysis			Skill needed - cultural understanding and awareness - personal characteristics - professional skills - interpersonal skills - language and communication skills.	The findings of the study are based on findings from Vietnam (not generalize results)
Barba et al. 2007	Cross-sectional (Spain)	316 Spanish firms	H1: ongoing training positive effect on performance H2: no differences between general or specific training H3: no differences between training in work or training outside H4: more advanced training techniques positive effect on performance H5: long-term oriented training positive effect on performance	Regression analysis	- planned/ not planned training -general (multi-skill)/ specific training - in work/ outside training - advanced/ traditional training techniques - long-term/ short term oriented training	- managers' abilities - managers' involvement - HR management ratios - profitability - overall firm result	H1: planned training has a positive effect on managers' ability and involvement H2: there are not differences between general or specific training (but general training improves managers' ability) H3: there are no differences between in-work or outside training H4: more advanced training techniques improve HRM ratios and profitability H5: long-term oriented training improves managers' involvement and the overall result.	Cross-sectional design Economic profitability and overall result influenced by many factors

PAPER	STUDY TIPE	SAMPLE	HYPOTHESIS	STADISTICAL ANALYSIS	TRAINING VARIABLES	PERFORMANCE VARIABLES	CONCLUSIONS	LIMITATIONS
Jones & Oswick 2007	Qualitative research Case study (United Kingdom)	Nineteen team-leaders (international manufacturer of photo-products)	There are not hypotheses. The research evaluates the Outdoor Management Development program	- transcribed interviews - focus group discussions - learning journal entries -individual questionnaires - field notes - observations	Two forms of Outdoor Management Development program: * centre-based, short duration '*micro-dynamic*' group problem-solving activities incorporating a structured, facilitated review, * *macro-dynamic* activities which tend to be much longer in duration, wilderness-based, utilize outdoor-pursuits skills, require a greater level of physical commitment from participants, place less emphasis on structured reviews	- Training reactions - Training outcomes: * intrapersonal (for example, awareness and understanding of self), * interpersonal (such as awareness, knowledge or understanding of others, changes in interpersonal behavior) * 'work behavior' (claims of changes in work behavior supported by specific examples)	* micro-dynamics are valuable in their own right as an effective means of developing aspects of team-working and leadership, while macro-dynamic activities seem to offer less scope for producing meaningful work-related interpersonal outcomes. *The 'power' of OMD as a training medium may lie in its capacity to generate cognitive dissonance within participants which, when reduced through a process of facilitated sense making, has the potential to change work-related attitudes and behaviors	Subjectivity of a large part of the data used
Barba et al. 2009	Cross-sectional (Spain)	316 Spanish firms	H1: provide training possitive effect on organizacional performance H2a: positive relation between the proportion of managers trained and performance H2b: positive relation between the time dedicated to managers training and performance H2c: positive relation between the amount of resources dedicated to managers training and performance	Regression analysis	- training/ no training - percentage of managers being trained - mean of hours of training received by managers - resources dedicated to manager training	- managers' abilities - managers' involvement - managers' innovativeness - financial performance: return on assets (ROA).	H1: providing training to managers has a positive effect on managers' abilities, involvement and innovativeness H2a: percentage of managers being trained has not effect H2b: the hours of training per manager is positively related with the improvement of both managers´ abilities and managers´ innovativeness H2c: the resources the firm invests in training its managers have a positive effect on all of the measures of managers' effectiveness and on firm performance	Cross-sectional design Not possible to examine the causality of the relationships between training and performance

PAPER	STUDY TIPE	SAMPLE	HYPOTHESIS	STADISTICAL ANALYSIS	TRAINING VARIABLES	PERFORMANCE VARIABLES	CONCLUSIONS	LIMITATIONS
Landeta et al. 2009	Cross-sectional (Spain)	326 companies with more than 50 employees	Turnover expectation is negatively related to company readiness to run continuous management training.	- Spearman correlations matrix - cluster analysis	- Percentage of managers trained against the total number - Does the company assume the cost of Continuous Management Training (CMT)? (Lkert 1 a 5)	- expected management turnover: * perceived risk of manager turnover when the company has made an important investment in training * likelihood of managers abandoning the company in the short to medium term when in this case it is the managers themselves who have invested their own time and money in improving their training level	- clear absence of relationship between management turnover and the readiness of a company to opt for ongoing training (main hypothesis is not confirmed)	Cross-sectional design Research into more specific components of training, CMT readiness and managers
Bastarretxea & Albizu 2010	Qualitative research Case study (Spain)	12 people in charge of the training system (Mondragon Cooperative Group)	- evidence that links management training in Mondragon with the development and retention of valuable managers; - evidence that links training with business management quality - evidence that links management training with knowledge transfer among cooperatives.	- In-depth interviews - annual reports - in-house magazines	*Training.* This is established individually, either in the form of courses or seminars, or through another manager's guidance.	- turnover rates of managers - processes of knowledge sharing among cooperatives	- Mondragon's cooperatives have overcome the difficulties common to other cooperatives in attracting and retaining valuable managers - Mondragon's management training policy is internally perceived as a source of competitive advantages in the attraction, development and retention of managers training of managers has a positive impact on the quality of management's performance, generating a greater application of advanced management tools	Subjectivity of a large part of the data used