

CONCEPTUALIZATION OF THE CURRENT STATUS OF THE IMPACT EVALUATION OF HUMAN RESOURCES TRAINING IN ORGANIZATIONS

Claudia Díaz Leyva

Faculty of Business Sciences and Administration
Industrial Engineering Department
University of Holguin
Holguin, Cuba
claudia.diaz@uho.edu.cu

Clara Marrero Fornaris

Manager Head of University of Holguin
University of Holguin
Holguin, Cuba
cmarrero@uho.edu.cu

Carlos Nuñez Cruz

Faculty of Business Sciences and Administration
Industrial Engineering Department
University of Holguin
Holguin, Cuba
carlos.nunez@uho.edu.cu

Yolaine Cisneros Rodríguez

Faculty of Business Sciences and Administration
Department of Industrial Engineering
University of Holguin
Holguín, Cuba
yolaine.cisneros@uho.edu.cu

Abstract

In recent decades the organizational culture of human capital has grown as a valuable resource within organizations. That is why continuous training becomes the fundamental tool to achieve high levels of individual performance and compliance with business objectives. More and more resources are allocated to this process, and that is why it is overriding for companies to measure the effectiveness levels of training provided through the evaluation modalities and techniques. Numerous authors have studied the subject, among which we can mention Kirkpatrick (1976), Tamkin (2002), Garín Sallan (1991, 1996, 1997, 1998, 2000, 2001, 2006 and 2010), Pineda Herrero (2000) and Veredas (2005); others have proposed models and methodologies that include actions aimed at evaluating the training impact. In the Cuban business world there is not an organizational culture focused on the evaluation of training impact. The incursions on this subject are limited and in many organizations the evaluation of training is not considered as a fundamental element to determine the profitability and effectiveness of it. This article proposes a brief overview of the current trends on the human resources training and their evaluation in organizations, the models analysis and methodologies on the subject and finally their panorama in Cuba.

Keywords: human resources, training, impact evaluation.

1. The training of human resources

This paper presents some of the issues analyzed in the framework of the research "Methodology of evaluation of the impact of training in organizations" carried out at the University of Holguín and applied at the Caracol Holguín Commercial Branch. This article proposes a brief tour of some of the discussions held on the subject of impact evaluation of training and finally as closure, the description of one of the experiences revealed in practice in the framework of this research.

The characteristics of the variable environment demand from the organizations a continuous adaptation to change in the most advantageous way possible. It is for this reason that competitive companies use significant financial resources in training activities as a way of transferring knowledge, skills and competencies to the organization workers. Training has become an indispensable tool for the achievement of the organization objectives and an excellence factor and key to business success. In specialized literature and organizational practice, the terms used in training are diverse: training, learning, education, development, growth, among others. It is a priority to start by highlighting the points of view regarding these terms.

Buckley and Caple (1991) define training as the systematic and planned effort to modify or develop knowledge, techniques and attitudes through experience, reflection, study or instruction. Learning is for them the process by which individuals acquire knowledge, techniques and attitudes through experience, reflection, study or instruction. Education is a process and a series of activities aimed at training an individual to assimilate and develop knowledge, techniques, values and understanding, factors that are related not only to a small field of activities, but also to define, analyze and solve a wide problems range and with development refer to the general increase and the techniques intensification and capabilities of individuals through conscious and unconscious learning.

It can be said that training is a broad process that includes in its planning the different stages, learning by acquiring knowledge of how it is done, training by applying knowledge and converting it into skills and technique mastery and development focused on the improvement and professional, personal and organizational improvement.

Sikula (1994) defines training as the short-term educational process that uses a planned, systematic and organized procedure through which non-administrative personnel acquire the knowledge and technical skills necessary to increase efficiency in the achievement of organizational goals. According to the author, development consists in a long-term educational process that uses a planned and systematic procedure through which administrative personnel acquire conceptual and theoretical knowledge to improve administrative skills.

The training according to this author is a more direct and practical, aimed at direct workers to achieve the increase of their skills while the development remains only in theory for organizations managers. The current forms of administration show a different reality, since the distinctions between direct and indirect workers to the production has diminished substantially, in addition the greater worker's percentage of almost all organization performs tasks that need the theory and practice, being these inherent elements.

Other authors such as Werther and Davis (1991) and Calderón (1998) argue that the difference between training and development is not always very clear since they pursue a common keeping staff goal and management updated and developed. Many of the training actions generate long-term benefits that can extend throughout the staff working life and that will help them face future responsibilities and improve their performance in coherence with the organization aims.

On the other hand, Milkovich and Boundreau (1994) define training as a systematic process in which the behavior, knowledge and current employee's motivation are modified in order to improve the relationship between the employee characteristics and the employee job requirements. Peña (1992) considers that training is the company potential increase through the professional and human individual's improvement. Giscard (1992) conceptualizes training as the process to develop and improve attitudes, knowledge and men abilities according to their responsibility degree and hierarchy.

According to Siliceo (1996), training is a planned activity based on a company real needs or organization and oriented towards a change in the knowledge, skills and collaborator attitudes. This definition is in line with that expressed by Aquino (1997) and Blake (1997), where the former training conceives as all organized and evaluable action that takes place in a company to modify, improve and expand knowledge, skills and the staff attitudes in behaviors producing a positive change in the their tasks performance, and the second raises this that represents all organized and evaluable action that takes place in a company to modify, improve and expand the knowledge, skills and the staff attitudes in behaviors producing a positive change in their tasks performance.

Although there is a similarity between these definitions and the training concept, it should be noted that training is considered a much more comprehensive process, where the individual receives knowledge, applies the practice and develops skills in professional training search that will prepare him for future responsibilities within organization, while training is the consolidation of techniques learned together with the new methods incorporation, tools or techniques that likewise develop skills in the worker to improve their performance and efficiency within the institution.

Rul-lán (1997) asserts that training, training, instruction and training are concepts that are used continuously in the company to mean, with certain nuances, the process of development of knowledge, technical-professional skills and human attitudes of staff, with the dual objective of improving their performance in the workplace and helping their self-realization. It is important to highlight that various terms are used to conceptualize the process related to training and even to the same term different contents are associated with it and vice versa. Ayala (2004) considers training as an educational process of strategic character applied in an organized and systemic way where employees acquire or develop specific knowledge and skills related to work, and modify their attitudes towards the tasks of the organization, the position or the work environment. Other specialists consulted divide the training approaches and training in dependence on the staff to which it is oriented, whether managerial or worker, although in the business world the terms are used interchangeably. From the above analysis it can be highlighted that various terms are used to conceptualize the process related to training and even to the same term different contents are associated with it and vice versa. Other specialists consulted divide the approaches of training and training in dependence on the staff to which it is oriented, whether managerial or worker, although in the business world the terms are used interchangeably. Several of the authors mentioned as Aquino (1997), Blake (1997), and Ayala (2004) agree that training is a continuous process, where skills are acquired or developed that generate positive changes in personnel and organization.

For the purposes of this paper and in the current context, it is decided to use the training term, since it is closely related to the content of the research and its field of action in the business and non-teaching fields. In the same way, this is selected according to the terminology used in the legal framework of the country in question.

Currently, more and more resources are allocated to the training process and that is why it is paramount for companies to measure the training effectiveness level provided through training evaluation techniques. The impact evaluation and the training profitability analysis is one of the evaluative modalities that are carried out within the organizations with the measuring purpose the repercussions that the training actions present for the organization.

1. 1 Training evaluation in organizations

If we understand training as the process aimed at achieving certain goals, it cannot be conceived without a systematization that allows an order between internal sub-processes and activities to be carried out. It is then when talking about improvements we must first think about evaluating the training process. It is necessary to know if the activities given are effective or not, whether or not they serve the organization purposes, to what extent the staff has been affected and the expected skills have been developed. The evaluation is needed to be able to see at what point we are meeting the proposed objectives, to know if progress was made or not, to determine the direct or indirect effects of the intervention and to allow in time the rectification of errors committed during the training cycle.

Evaluating is a systematic, methodical and neutral process that makes it possible to know the program effects, relating them to the proposed goals and the resources used. It could be said that evaluation is a process that facilitates the identification, collection and useful information interpretation and favors the feedback process. (Díaz Rojas 2015)

For Stufflebeam (1987) the evaluation is the systematic judgment of the worth or merit of something. To evaluate means to issue a value judgment. This judgment is issued based on a value and an associated standard. The value indicates what is good or not, and the standard the extent to which something is good or not in relation to value. This position is opposed to the so-called preordained evaluation, which is the Tylerian evaluation according to the designed program objectives. (Rutty, 2007).

The training evaluation according to Kenney-Donnelly (1972) can be defined as the analysis of the system total value, a program or a training course in both social and financial terms (...) The evaluation tries to assess the cost-total benefit of the training and not only the achievement of its immediate objectives.

It can be concluded that the evaluation process consists in gathering information, objective valuations and objectives comparisons and variables that will help the feedback process and the decision making process.

Pineda Herrero (2010) identifies evaluative modalities series that are inherent to each other, among these is:

- Diagnostic evaluation, focused on pedagogical analysis of the designed training coherence and its adaptation to the training needs detected in the organization and in the participants.
- Formative evaluation, which analyzes the teaching-learning process progress and progress in achieving the objectives set.
- Summative evaluation, focused on the final results obtained by the participants in terms of competences reached at the training end.
- Transfer Evaluation, which determines the degree to which participants transfer or apply to their job the learning and skills achieved with the training.
- Impact evaluation, focused on determining the repercussions that training has on the organization in terms of qualitative and quantitative or monetary benefits, thus orienting itself to discover the economic training profitability for the organization

Among these five modalities there is a mutual interdependence, since a comprehensive evaluation process must contemplate them all and use systemically the information that emerges from them.

One of the first problems that were noticed when initiating work of this research was that although the issue of impact evaluation recognized a considerable history in the literature on evaluation of training activities, it had very little background in the daily teaching practice of the training. On the other hand, when reviewing the literature, it was observed that the field is not exempt from contradictions and controversies among the authors, either in relation to the proposed methodological approaches, as well as in the definitions of what is meant by impact evaluation.

1.2 Evaluation of the training impact in organizations.

The training impact assessment is one of the evaluation modalities used in organizations in order to know the effect that the training activity imparted had on the staff and in the organization in the long term. By training impact, we can understand with Pineda Herrero (2000) the repercussions that carrying out training actions entails for the organization, in terms of responding to training needs, solving problems and contributing to the strategic objectives achievement that the organization has raised.

Cabrera Rodríguez (2003), conceptualizes impact is "a situation that produces a significant set and lasting changes, positive or negative, foreseen or unforeseen, in the people lives, organizations and society". Esquivel García (2007) states that impact evaluation is a participatory process that involves all the instances that makes up the training system. Participation must occur not only in the evaluation process itself, but also in the timely and effective corrective measures application derived from it.

According to Gairín Sallán (2010) the impact evaluations realization requires analyzing the place and work context and the organization after a completion of the training time, because it is understood that an immediate application of what has been learned is not always possible because it affects a work cycle already started or for demanding a professional experience that is not yet available. It also demands actions and observations in the workplace and in the organizations, involving in the process other organization members (superiors, colleagues, users,) different from the participant in the training. Impact evaluation must be understood, therefore, as "an evaluation judgment on the quantitative dynamics and qualitative changes operated in the people and organizations benefited by the training action establishing a direct or indirect causal link (Cabrera Rodríguez, 2003)

Alonso García (2007) conceives that the evaluation of the training impact as part of the training process must take into account the stages through which it takes place. It covers four basic moments, which correspond to the classic evaluation modalities:

- Before starting the training: initial or diagnostic evaluation
- During the training: procedural or formative evaluation
- At the training end: final or summative evaluation
- Sometime after completing the training: deferred evaluation or transfer and impact.

In general, the impact evaluation must be understood as a result analysis and repercussion that the application of the knowledge and skills acquired in the training courses in the labor, organizational and social areas had in the long term. It is important to highlight the dependent relationship between the different evaluative modalities, since they constitute step by step the bases of the previous ones and the pattern and comparison level with the real and the expected, these are closely related to the four stages proposed by Alfonso García (2007).

One of the most discussed problems in the scientific world is the concern for evaluation methods, known as the "paradigm war". There is great controversy among the qualitative proponents and quantitative methods. Evaluators who rely on quantitative methods see causality in covariation terms of program activities and outcomes. The methodological design accepted as more precise by them is the experimental type. They use techniques such as quasi-experimental studies, and are concerned with statistical generalization. Qualitative evaluators postulate that aggregate covariation is a limited use of the causality understanding, since the mere observation of the results obtained leaves aside all the complexity of the individual's reality. What they propose is the observation of the interaction between individuals to understand what caused the desired or undesired result, from an inductive approach that they consider superior. From this perspective they try to recover the context and the human dimension of the phenomenon under study, they are interested in the social processes analysis and not only concentrate on the results, they use techniques from naturalistic research, ethnographic methods, case studies, etc.

Despite being a subject with a broad global knowledge level, in Cuba there is no organizational culture focused on the training evaluation in organizations. There are few companies in the territory that contemplate this within the training process, this is given by the difficulty that evaluators present when using impact evaluation techniques where it is difficult to separate the training results from the other variables present in the performance of those trained and their work result.

Considering the previous analysis, it can be affirmed that a correct evaluation development must be in context, be understandable, involve the workers, use appropriate tools and various techniques that provide precise results, be aimed at the organizational fulfillment objectives and determine the deficiencies and shortcomings of the training process in order to provide feedback in order to ensure greater quality in the training process.

1. 3 Methodological approaches to the evaluation of training impact in organizations

In recent years, studies to measure the training process impact on the organizations performance have been accentuated. Although training is a studied subject that has shown great progress, it has not occurred in the same way in the measurement of its impact. In the international arena, there are several authors who have formulated procedures and methodologies that seek to measure the training effect, but not at the national level, where there is a lack of this studies type focused on the business world. The analysis begins by a works group of Anglo-Saxon origin which is more abundant and in their majority, is referred to the private sector. Among the works consulted Kirkpatrick stands out, a pioneer more than 40 years ago in the training evaluation field.

Kirkpatrick Model (1954)

With the creation of its model in the 1950s, Kirkpatrick established the basis for the continuous training evaluation. Raises that there are three reasons to evaluate, the first is to justify the training department existence showing how it contributes to the objectives and the organization performance; the second would be to continue or finish a program and the third reason attributes it to the need to obtain information on how to improve future courses or training programs. The model has four levels:

Level I. Reaction

The evaluation at this level measures the reaction of the participants to the training, in other words, the satisfaction level with the program received. It should be noted that high satisfaction does not guarantee learning, while low satisfaction shows that participants do not feel motivated to learn, which reduces the learning to occur possibility.

Level II. Learning

The objective of this level is to evaluate the participant's learning, determining to what extent these changes attitudes and improves knowledge and skills as a result of the training program. Kirkpatrick recommends the comparison before and after to detect the changes that occurred.

Level III Behavior

It is important, once the reaction and learning have been measured, to assess the transfer level what has been learned to the job. Changes in worker behavior that influence and reflect on the job and contributes to the organization objectives. Kirkpatrick states that one should not ignore the previous levels and move directly to this as it may be that the reaction in the participants is not good so that learning has not occurred, so the change in behavior will not be visible.

Level IV Results

When we talk about results, they can be reflected in the increase in production or sales, the increase in quality levels, the costs reduction or the accidents occurrence and labor incidents, among others. At this stage, the focus should be on determining the impact that training has on the organization in terms of qualitative and quantitative benefits.

The main criticisms of the traditional model of impact evaluation are especially directed at the Kirkpatrick approach. Different authors, including Nickols (2000), Donovan (1999), Boverie (1994), Tamkin (2002), Auchey (2000), have studied traditional approaches and presented a critical view of the four levels. Among the main criticisms is the association assumption from one level to another, the rigidity of its temporal perspective, the reduced the purposes vision of evaluation, difficulties in practice in the application of the third and fourth levels, the little information usefulness obtained with the application of the first level, among others.

According to Pineda Herrero (2000): "Kirkpatrick adopts a qualitative approach to the training impact and, after raising the measuring profitability difficulties, proposes that it be considered as another evaluation element, interesting when it is viable. It poses as a mistake to convert profitability into the ultimate goal of any evaluation process, since it would lead to a reductionist training impact vision. "

There are other works within this group, which do not differ much from the Kirkpatrick approach, the so-called Tamkin "followers of Kirkpatrick" among which he mentions Warr, Bir and Rackman (1970), Hamblin (1974), Brinkerhoff (1987) Bushnell, 1990, (IPO); Sleeze et al, 1992, (TEE); Phillips (1994), (ROD); Fitz Enz, 1994, (TVS), Kaufman, Keller and Watkins, (1995) (OEM); Bernthal, (1995), Molenda, Pershing and Reigheluth, (1996) Indiana, Kerns and Miller, (1997), KPMT, Industrial Society (2000), Carousel of development. This works group does not make any substantial change in the Kirkpatrick model, however, they present what Tamkin called an "expanded model" where they add more evaluation instances within the procedure, before evaluating the reactions and after analyzing the results. The objective of these authors is to carry out an extensive the business context analysis, suggesting at the same time that the organization benefits should be more explicit and emphasize the result quantification such as the return on investment.

Brinkerhoff (1987) collects in his model 6 evaluation instances. The contribution of this author lies in the inclusion of elements that not all consider as the control of the planning definition of objectives and the project viability. According to the author, this model is an aid to conceptualize good training programs and systematically guides the information collection necessary to make them work and generate benefits for the organization.

Wade (1990) sees evaluation as measuring the value that training brings to organizations. It follows logic very similar to Kirkpatrick's model structured in four levels, but contains differences in the levels referred to the impact, according to Muñoz Carine (2012), the author presents a two-dimensional the impact evaluation conception and profitability training. Identifies two progressive levels in this evaluation type, the evaluation of the results that the training founds in the jobs, detectable through qualitative and economic indicators, and the impact evaluation that the training generates in the organization for what it proposes the cost-benefit analysis as a measurement instrument.

According to Rutty (2007) both Phillips and Stone, Robinson and Robinson, incorporate the evaluation of the "unobservables" as another independent evaluation instance that requires consideration and the use of specific techniques for its survey and control. They define as "unobservable" those knowledge and skills that cannot be observed through the observation of the explicit individual's behavior. In the Robinson case this maintains the same Kirkpatrick levels, but divides the third level in two, classifying the behaviors between type A "observables" and type B "unobservables". While Phillips and Stone also divide the fourth level in two, where they analyze the effects on the organization under the impact name and where they perform an analysis the return on investment, this being the greatest contribution of the authors, since they analyze the value monetary training impact.

Among the authors who present an advance to the Kirkpatrick can be mentioned Swanson and Holton, his model is mainly seeking to monitor the changes that the training generates in the results at the training process end and its transfer to the job position. It recognizes three results areas: performance, learning and perception. The authors incorporate the concept of "performance drivers" in the evaluating system performance process that are performance variables that can presage an improvement in the result. According to Donovan, this author simplifies the Kirkpatrick model by focusing on the influences on the individual performance results.

Tamkin also studied another models series that focus their concern on the evaluation purpose, those that use the different measurements and those that evaluate the training through computer science. The similarity between these works is that there is a growing focus on non-financial training impact measurements. According to Rutty (2007),

these authors develop a more updated and less schematic training processes view the in organizations, as well as the qualitative techniques use to gather information.

Within the working group that focuses on the evaluation purpose Tamkin mentions authors such as Pulley (1994), Stufflebeam (1987), Newby (1992) and Preskill and Torres (1999). Among second authors group use different measurements are Kraiger et al (1993), Kaplan and Norton (1996), Lee (1994), Anderson Consulting (Moad, 1995, Abernathy, 1999).

The next group to mention is the work on impact assessment in Spanish speaking where you can see the orientation to the public sector as well as to the private sector. This group is scarce production on the subject, but interesting works developed on the subject were selected. Among the authors mentioned are Nakano, Pineda Herrero (2010), Guerreo García (2003), Alonso García (2007), Serrano Suarez (2011) and Fuentes Reyes (2014).

Nakano and Melillo (1997) propose a specific methodology for impact evaluation in Public Administration. They divide their proposal into two parts, the evaluation in the competences field and the evaluation in the results field. One of the central requirements of the proposed scheme is the comparison of the training results with the performance parameters or standards. As in the public administration this is non-existent information, they define as competence criteria the relevance, effectiveness, coherence, efficiency, synchronization and conformity, that they take from Le Boterf.

Pineda Herrero (2010) proposes a holistic impact evaluation model that aims to design a systematic, rigorous and coherent evaluation plan that takes into account the functions and apply the different modalities. The model answers five basic questions that affect the training evaluation: What do I evaluate? What do I evaluate? Who evaluates? When do I evaluate? and How do I evaluate? The methodology has six levels to develop and according to the author arises from the answers crossing to the five basic questions and their integration into a global whole, thus allowing the effective evaluation plan design and analyzing all the variables that affect the evaluation in an integrated manner, and designing global, coherent assessment processes adapted to each reality; In short, effective and efficient evaluation processes based on the available resources.

There are other works developed by Cuban researchers, including the one developed by Cabrera Rodríguez in the Science and Technology Group of the Agrarian University of Havana, this model aims to develop an integrated diagnosis system, improvement and training for leaders who conceive that the training meets the individual and organizational needs. The proposal made to measure the training impact by the University Branch of the Youth Isle considers three levels, the first focuses on the impact for the entire organization, the second for the students and the third focuses on the trainee's opinion about the training process received.

Guerrero García (2003) of the CETDIR / CUJAE research group in the city of Havana, ISPJAE, highlights five levels very similar to Kirkpatrick, supported by this proposes a methodology where he first defines the impact to be achieved in line with the organization strategic projection and the associated necessary competencies. Then he designs the training program and executes it by making intermediate measurements. Finally, it evaluates the training program impact through previously defined indicators. The procedure measures the trainee's satisfaction, the changes in the knowledge level and the individual's skills, the application in their performance in the workplace, the impact on productivity, the effectiveness and the organization efficiency and the social impact.

The Alonso García (2007) proposal of the University of Cienfuegos, part of the basic principles of the audit, is applied to the specific training needs in the organization and allows evaluating the quality of the training program executed. Its methodology does not differ from that of the aforementioned authors, it has four levels of evaluation that includes the measurement of customer satisfaction, the evaluation of effective learning, the application in the workplace and the impact of the training as a whole. the company. The author raises as a deficiency the realization only of the first level of the methodology in the organizations, which prevents knowing to what extent the transfer of the acquired knowledge and the level of impact that the organization of the training plan had on the organization arrived. For this last step, the author explains that the main element to take into account is to identify to what extent the training has contributed to the fulfillment of the strategic objectives of the organization.

FORMATUR professors from the city of Santiago de Cuba applied a methodology to evaluate the impact of training in tourism companies. It has a step to assess the degree of compliance with the stages of the Training Management Process, then makes an assessment of the level of satisfaction of the actions carried out and as a final step evaluates in an integral way the effect of the training. In the same sector of tourism professors from the Central University of Las Villas propose a methodology composed of five steps, where in the third the training impact according to Kirkpatrick levels is measured.

The procedure proposed by Serrano Suarez (2011) focuses on the teaching area by measuring the impact of training on the professors of the University of Holguín. This procedure is structured in four steps, first the training is diagnosed, the impact indicators are determined, analyzed and evaluated and a general evaluation of the results obtained and follow-up of the training is carried out. The procedure includes in its follow-up stage the continuous improvement approach where the progress achieved in each cycle is valued and the new goals are defined, which contributes to developing the capacity for permanent change.

Fuentes Reyes (2014), also from the University of Holguín, designs a procedure in correspondence with the four Kirkpatrick levels and is based on an integrative approach to cover the fundamental moments of the training process. The author proposes a set of indicators as a tool for measuring the impact at each level established. For him, evaluation is a systematic process, which will allow continuous feedback and decision-making based on the programs improvement and elements that compose them.

In summary, although the authors express, almost unanimously, that there is nothing new after the model of the four levels, an interesting path opens up through the latest contributions to pay for the evaluation practices of the activities of training. In general, there are different approaches and methodologies, as well as authors who have investigated the subject in depth; they are the majority of Anglo-Saxon production, while there is a lack of Spanish-speaking works. It can be concluded that each of the approaches studied, both in the Spanish works group and Anglo-Saxon language, present their limitations and advantages. All place the impact evaluation of training as an important element in the training plan development and vital to achieve internal and external customer satisfaction, thus contributing to the organization progress and its objectives. However, some such as Kirkpatrick (2007), Philips (1990), Wade (1990) and Brooking (1987) Bushnell (1990), Bernthal (1995), Hamblin (1974), among others, only approach the theoretical conception, without deepening in the phases, stages, steps and techniques for their development; among those who deepen Guerreo and García (2003), Alonso García (2007), Serrano Suárez (2011) and Fuentes Reyes (2014) but respond to specificities of the entities to which they are directed. From the methodologies study and procedures, a network analysis was carried out between the variables treated, the presence of these in the authors' criteria and a cluster analysis for the authors using the IBM SPSS v.20 Ucinet and NetDraw software. The authors of the most influential at the network are Kaplan and Norton, Newby, et al Kraiger, Anderson Consulting, Pulley, Brinkerhoff, Bernthal and Kirkpatrick. The levels proposed by Kirkpatrick: reaction, learning, behavior and results; These are the elements most addressed in the different models and the variables analyzed are the most influential and related, while the analysis of the economic impact, the study of the context and training inputs the and evaluation process, and the feedback and improvement are the least treated.

Despite being an issue with a broad global knowledge level in Cuba, there is no organizational culture focused on the evaluation of training in organizations. There are few companies in the territory that contemplate this within the training process, this is given by the difficulty that evaluators present when using impact evaluation techniques where it is difficult to separate the training results from the other variables present in the performance of those trained and the result of their work. Another difficulty is the quantitative complexity analysis when measuring economic indicators such as the return on investment or when determining the influence level of the training received in increasing the organization productivity.

We can reach the conclusion after having made an evaluative analysis of the models, which should not measure the impact of learning in isolation, should take into consideration other variables that are important to see it as a process integrated, the models do not perform a multifactorial and systemic study, in the majority It begins with an initial diagnosis of the company or of the people who are going to form part of this training process. It highlights the close relationship that is established between the levels and an integral analysis of them is carried out through the evaluation of the reaction, learning, and behavior at work and performance at the company level. Many perform a fundamentally quantitative and not qualitative study. There is no conclusive study regarding the subject.

The methodologies scarcity in Cuban organizations is another impediment to carry out impact evaluation, despite the worldwide models existence and procedures. Few organizations have their own methodology that measures the training impact, which in turn the application of these requires a very integrated work between the Human Resources department or the training area and the line, area or position of work. As evidenced by the need to develop a methodological proposal for the evaluation of the impact of training, which integrates the positive elements of the preceding approaches and is appropriate to the particularities of the entity under investigation.

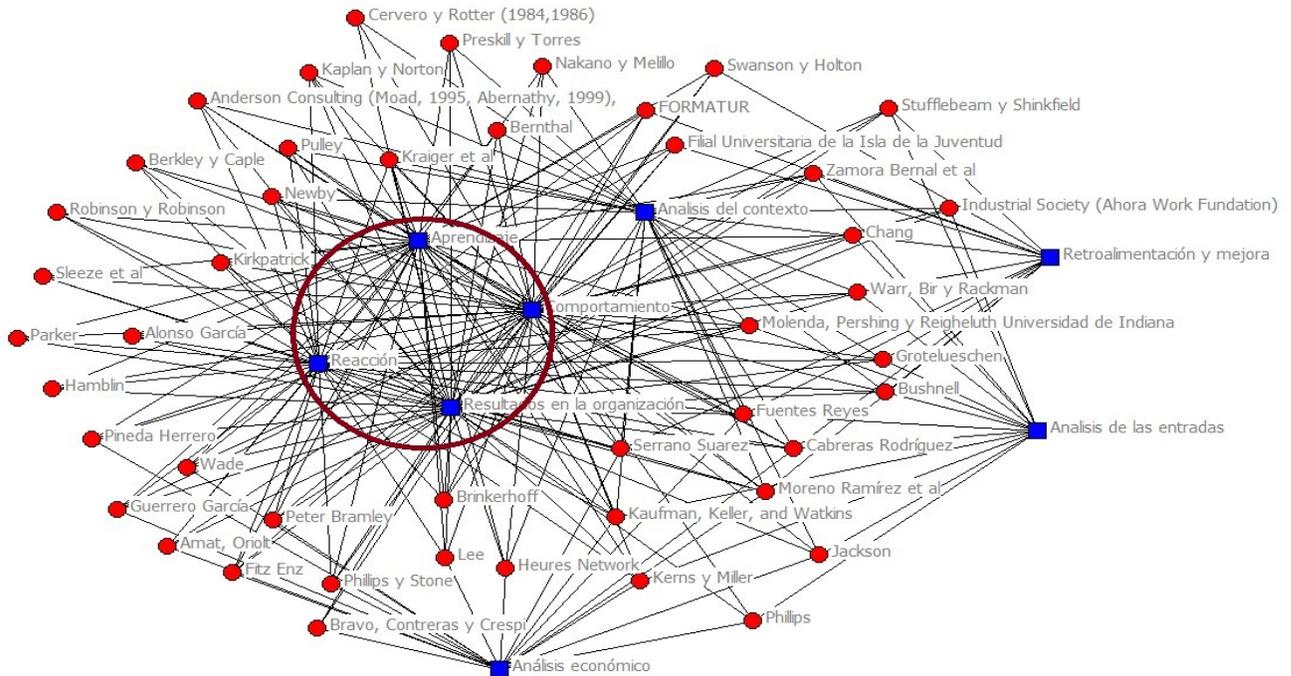


Figure 1. Network analysis in NetDraw between procedures by variables

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Biographies

Claudia A. Díaz Leyva is an engineer professor in the Department of Industrial Engineering at the University of Holguín. She achieved a university degree in Industrial Engineering at the University of Holguín and is currently studying in the Master's program of Industrial Engineering at same University. She has participated in several national and international events. She has conducted research in different companies in the territory. Her research interests include human factor engineering, ergonomics and health and safety at work, human resources management and the evaluation of the impact of training.

Clara Marrero Fornaris is an Industrial Engineer graduated from the Central University of Las Villas. Master in Resource Management. She has a Ph.D. in Technical Sciences. Manager Head of the Holguín University. She has carried out research in the field of Human Talent Management. He has deepened in the management of the training, subject that he worked in his doctoral research. He has numerous publications and presentations at national and international events. He has taught and consulted in Cuba, Venezuela, Nicaragua and Colombia.

Carlos Rafael Nuñez Cruz is an engineer professor in the Department of Industrial Engineering at the University of Holguín. He achieved a university degree in Industrial Engineering at the University of Holguín and is currently studying in the Master's program of Industrial Engineering at same University. He works as Instructor Professor in the University of Holguín. He has participated in several national and international events. He has conducted

research in different companies in the territory. His research interests include human factor engineering, studies of times and methods of work and management of human resources.

Yolaine Cisneros Rodríguez is a professor in the Department of Industrial Engineering of Holguín University, Cuba. She achieved a university degree in Industrial Engineering at the University of Holguín and a Master's degree in Industrial Engineering at the same university. She has participated in several national and international scientific events. Her research interests include Ergonomics, Occupational Health and Safety and Management of hazard, vulnerability and risks.