ARTÍCULOS DE INVESTIGACIÓN

Assertive communication and teamwork: Results of an intervention program to the supervisors of a company

Comunicación asertiva y trabajo en equipo: Resultados de un programa de intervención en los supervisores de una empresa

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Summary

The study aimed to determine the effect of the implementation of the program "Manage your Talent" on assertive communication and teamwork competences. A quasi-experimental research design was used with pretest - intervention - post-test with control group. The sample included 28 supervisors from a private company, 13 in the experimental group and 15 in the control group. A type of purposive sample was used. The results suggest a positive impact of the program to significantly increase the achievement of assertive communication competences (U = 3.5, Z = 4.58, *** P < .000), similarly, in the dimensions Effective Dialogue (U = 8.0), Feedback (U =10.0), Conflict Resolution, the skills with the highest increase were effective dialogue and non-verbal communication. In the rest of them, the increase was lower. Regarding teamwork competence (U = 0.00, Z = 4.837, *** P < .000), in the dimensions Establishment of the Topic (U = 9.0), Goal Achievement (U = 15.0), Democratic Environment (U = 12.0) and Decision-Making (U = 7.0), the skills with the highest increase were Establishment of the Topic, Democratic Environment and Goal Achievement. Decisionmaking for Consensus Management had a lower increase.

Key words: Competences, human talent management, assessment rubrics.

Resumen

El estudio tuvo por objetivo determinar el efecto de la aplicación del "Gestiona tu Talento" en las competencias de comunicación asertiva y trabajo en equipo. Se utilizó un diseño de investigación cuasi experimental, con pre-test –intervención– post-test, con grupo control. La muestra incluyó 28 supervisores de una empresa privada, 13 en el grupo experimental y 15 en el grupo control. Se empleó un tipo de muestra intencional. Los resultados sugieren un impacto positivo del Programa para incrementar significativamente el logro la competencia de comunicación asertiva (U = 3.5, Z = 4.58, ***P < .000), del mismo modo en las dimensiones diálogo efectivo (U = 8.0), retroalimentación (U = 10.0), resolución de conflictos (U = 7.0) y comunicación no verbal (U = 4.0), las habilidades de esta competencia en las que se registró mayor incremento fueron de diálogo efectivo y comunicación no verbal, en las demás, el incremento fue menor. Con respecto a la competencia de trabajo en equipo (U = .00, Z = 4.837, ***P < .000), del mismo modo en las dimensiones (U = 9.0), logro de la meta (U = 0.00, U = 0.0), logro de la meta (U = 0.00, U = 0.0), del mismo modo en las dimensiones (U = 0.00, U = 0.00), logro de la meta (U = 0.00, U = 0.00), logro de la meta (U = 0.00, U = 0.00), del mismo modo en las dimensiones (U = 0.00, U = 0.00), logro de la meta (U = 0.00, U = 0.00), logro de la meta (U = 0.00, U = 0.00).

= 15.0), clima democrático (U = 12.0) y toma de decisiones (U = 7.0). Las habilidades de esta competencia en la que se registró mayor incremento fueron establecimiento del tema, clima democrático y logro de la meta. Menor incremento en toma de decisiones para gestionar consensos.

Palabras clave: Competencias, human talent management, rúbricas de evaluación.

There are different research backgrounds on talent management in Peruvian companies and worldwide. It is evident that every year more importance is given to human capital and, in particular, to professional development; however, many training courses are conducted without a prior needs evaluation otherwise as isolated attempts in the event of problems that arise out in daily tasks.

On the other hand, this research goes from the assessment of supervisors' generic competence achievements, that is, their abilities, attitudes and knowledge, according to the duties they perform as organization supervisors. Our major goal is team and the whole organization personal development.

De La Cruz (2009) in an explanatory descriptive study, attempts to analyze motivating actions and incentive program in labor performance works within the new human potential management in financial institutions in Huamanga. Surveys and interviews were conducted on workers, executives, customers and users in order to become aware of performance results, motivations and incentives. Likewise, an analytical study was performed because it was divided into types of motivations, incentives and stimulus to establish the level of labor performance in financial institutions in Huamanga. It was proved with statistically significant evidence that labor performance in financial institutions in Huamanga is definitely influenced by motivating actions and different programs of incentives such as individual acknowledgment, impartiality and transparency in employees' promotion and mainly productivity bonuses, showing this validity of main hypothesis. Moreover, it is possible to state that, the mastery of skills and abilities, good level of updated knowledge, proper behaviors and conducts which generate an organization environment for optimal labor performance have a significant and decisive influence from a set of actions of motivation, stimulus, incentives, recognitions, all of them characteristics of a new people management with which the validity of main hypothesis is strengthened.

Sánchez (2004) in a study on human talent management, states that one of the most important conclusions of his thesis is that a competitive advantage can be created as an integrated system. Precisely, human factor is a key in this articulation process since it establishes a difference between attitudes and communication capacities and teamwork. The secret is to know how to

manage human talent, combine strengths with opportunities, become aware of our competence and, above all, learn what we have doing better; i.e. what competencies make us different from our competitors and take advantage of them by focusing on their application to solve problems and achieve goals.

Dánvila (2005) in his doctoral thesis La generación de capital humano a través de la formación, un análisis de su efecto sobre los resultados empresariales, analyzes the strategic significance of personal training as a factor that generates human capital which leads to sustainable competitive advantages in time supposing the obtaining of the best business results. That is, this work is framed within the current lines of research studying the last causes of business results. The main theoretical ground supporting the research is the Theory of Resources and Capacities since thus we can consider company's resources and internal capacities may generate competitive advantages. Concretely, this work highlights the significance of intangible resources associated with human resources since they facilitate the obtaining of lasting income, because assets are hardly imitable and replaceable and in some cases, specific of an organization and with high degree of ambiguity. The analysis model planned in the study contrasts the fact that a bigger effort in training leads to better business results and a high degree of loyalty by customers. Besides, it was evident that strategy influences on the effect exercised by training on results. The empiric study was conducted on a set of companies belonging to the private security sector, engaged in surveillance and development.

Management of Human Talent.

Human management is an essential component of every organization and more than a set of actions, it means an integrating process, thus strategic management of human resource enables to integrate the worker effectively with the productive work environment (Saldarriaga, 2007).

In this sense, Dolan (2003) according to Saldarriaga (2007) states that the purpose is to provide the personnel with competencies necessary for conducting their tasks, and integrating human management into general organization management.

It involves identifying, planning and applying human resource policies for all the organization and, at the same time, seeing organization from a systematic and multi-dimensional view wherein different trends, strategies and human management techniques are integrated.

Likewise, Tejada (2003) states that the organization management is based on effective management of people strengths. We can go from the significance given to an individual as a human being with potentialities that may be developed in his favor and his work environment. Learning is highly valued as an alternative for permanent transformation. It refers that potentiality and "talents" are human, individual and collective constructions susceptible of being amended, strengthened and kept, or disappeared and extinguished. From the organizational perspective, talent management according to this author is based on the fact of legitimating that the human potentiality can be associated with efficient and effective productive processes.

The perspective of the aforementioned author is very important since it gives an intrinsic value to the organization supervisor, recognizes his single and different abilities and through reflective experiences of daily routine, it seeks continuous improvement ways by interacting with others. To this effect, it is also vital that there are favorable environmental conditions regarding treatment, process and tool organization available for an effective work.

Moreover, in this specific research, we expect the supervisor also learns knowledge which enable him to detect, support, foster, test and encourage talent of his supervisors and his talent as well; all of this means a new alternative to organizational change.

This philosophy involved "search of globalization or totality, from legitimating and respect of differences and individualities", for organizational transformation. This point of view revalues the human being as a change agent and, at the same time, as a person entitled to enjoy work as a source of life and personal realization.

Ivancevich, Dibson and Donelly (2003); see Saldarriaga, (2007) who consider that:

...from the human management area, actions should be taken to solve problems in order to achieve organizational objectives, but it has to be done by promoting the development and satisfaction of workers and from the human management processes, a clear and marked organization interest in people should be seen by treating them as individuals and contributing to satisfying needs, which in this regard means a human being conception as something more important than a simple "resource", so we can question: Is this conception present in our companies? Are human management processes of local companies guided by the conception that a human being is the most important piece in an organization? Human beings are taken into account when determining human management actions inside the organization? Consequences caused by human management actions and strategies on personnel are under analysis? (p. 9).

We can infer that in talent management, relevance is given to a person with motivations and particular needs; and every organizational improvement must be done by taking into account personal aspects of its members.

Regarding human talent management, Chiavenato (2002) states that the human talent management is the set of policies and practices necessary for organizing and guiding people. Recruitment, selection, performance evaluation and rewards are included. Human talent management is an administrative function engaged in hiring, training, developing, motivating, evaluating and rewarding supervisors. It enables the effective collaboration of people to achieve organizational and individual goals.

According to Alles (2010) human talent management means to promote full human and professional development when a person interacts with his work environment. It is intended that a person applies in work the best he can "be" and "do" by showing high performance and satisfaction with work and interrelation with others. It involves making possible the application of all its abilities, in an optimal manner, with effectiveness and based on best attitudes towards himself, his peers, his organization and his society.

Likewise, Aktouf, (1998) cited by Saldarriaga, (2007) states that the human talent management must be conceived in the framework of the

organization, from a systemic and multi-dimensional perspectives wherein different trends, strategies and techniques of human management are integrated, which can make possible an administration where there is no alienation but rehabilitation of the subject – an organization actor. Human talent objectives should be mentioned, such as:

Human Talent Management Objectives.

Human talent management objectives, according to Chiavenato (2002) are as follow:

- 1) Help the organization to achieve its objectives and mission.
- 2) Provide the organization with competitiveness.
- 3) Provide the organization with well trained and motivated supervisors.
- 4) Contribute to self-realization and work satisfaction.
- 5) Develop and maintain life quality at the workplace.
- 6) Manage changes.
- 7) Establish ethical policies and develop socially responsible behaviors.

Basis for the Human Talent Development Program.

Rodríguez (2009) from a behavioral perspective, states that training based on competencies is oriented towards providing a person with elements to acquire competences needed for the position he holds. Benefits of this training are as follow:

- 1) Focus on relevant behaviors and abilities.
- 2) Ensure alignment of training and development with organizational objectives.
- 3) Concretize an effective utility of training and development.
- 4) Create a reference framework for managers.

Bequer (2008) proposes personal and professional development of the personnel based on own understanding: corporeality, language and emotionality observation. According to these dimensions, he proposes personal development based on: a) selection of what a person does, b) leadership of actions, c) design of talks, d) personal transformation and e) achievements obtaining.

General Hypothesis.

"Manage your Talent" program is effective to increase assertive communication and teamwork competencies of supervisors of a private company in Lima.

Specific Hypothesis.

- H1: There are differences between the level of input and output of assertive communication competence of supervisors of the experimental group in the private company in Lima.
- H2: There are differences between the level of input and output of teamwork competence of supervisors of the experimental group in the private company in Lima.
- H3: The application of the "Manage your Talent" Program has more effect on assertive communication than on teamwork, in supervisors in the private company in Lima.
- H4: The application of the "Manage your Talent" Program has more effect on the ability of effective dialogue of the assertive communication competence in supervisors in the private company in Lima.
- H5: The application of the "Manage your Talent" Program has more effect on the ability of a democratic environment of teamwork competence of supervisors in the private company in Lima.

Method

Research Design.

In order to reply to any questions about research and test submitted hypothesis, for this research the experiment design is selected, specifically the quasi-experimental design with an experimental and control group, both pre-test ad post-test. (Kerlinger, 2007) enables to maximize primary systematic variance and control secondary variance. In this research, groups were already formed, according to free shifts accessible for personnel training.

Therefore, the sample was composed of 28 supervising collaborators, 15 of the control group and 13 of the experimental group. Groups were not assigned at random, participants making up the control and experimental group were fixed groups, because they were previously formed, they were already organized according to work shifts, even before the experiment.

GE O1 X O2 GC O3 - O4

GE: experimental group.

GC: control group.

O1 and O3: input observation of both groups.

O2 and O4: output observation of both groups, and

X: independent variable – experimental work.

For this research, a quasi-experimental design is pertinent, which is addressed to determine the effects of the "Manage your Talent" program in the competencies of assertive communication and teamwork of supervisors in a private company in Lima.

Hypothesis Test Strategies.

For the hypothesis contract process, the non-parametric Mann-Withney U test was conducted between the experimental and control group prior analysis of normal data distribution. Moreover, data come from an ordinal scale therefore a proper analysis by medians is shown.

Likewise, to contrast the program effect inside each group –experimental and control separately– we proceeded with the Wilcoxon test technique, and the level of significance (α) was contrasted to the value of test significance (p)

SPSS (Statistical Package for the Social Sciences) –Version 20.0–statistical package was used.

Variables.

1) Independent Variable: "Manage your Talent" Program.

- 2) Dependent Variable: Level of achievement of assertive communication and teamwork competencies in supervisors of the privative company in Lima
- 3) Variable: Assertive Communication. Hellriegel and Slocum (2009) Assertive communication is expressing trustingly what a person feels, thinks and believes, and at the same time that this person respects third people rights to have different points of view.
- 4) Variable: Teamwork. Work activity where several supervisors interact collectively to obtain common goals; they generate positive synergies through coordinated efforts: take on individual and mutual responsibilities and, finally, abilities of each of the team members are complemented to better achieve objectives. Interest in achieving shared goals. The following abilities were taken into account: a) Establish the situation or problem to work at, b) interest in achieving the goal, democratic environment and consensus decision-making (Kinlaw, 1991, cited by Hayes, 2002)

Population.

In a private company in Lima, the population is composed of 65 supervisors, with academic levels of technical tertiary education and others with university education. Socio-economic medium status. 39 of them shall be excluded due to work hours incompatible with training schedule.

Table 1.Population of supervisors of the private company in Lima according to their gender.

Participants	Women	Men	Total
	17	48	65

Sample.

The sample is composed of 28 participants, 13 of the experimental group and 15 of the control group. The sample was taken from the groups of

supervisors previously trained according to the work area of the company and work shifts.

Table 2.Samples of supervisors of the private company in Lima according to their gender.

Participants	Women	Men	Total
Experimental group	3	10	13
Control group	4	11	15
Total	7	21	28

The type of sampling of this research is not probabilistic, intentional because before the experiment there are established groups, not all population elements have the probability to be selected to make up a sample.

In both groups, participants come from the same hierarchical level -supervisors-, with a similar service time and educational level. An excluding criterion refers to those people who had less than one year of work experience inside the organization. This group distribution enabled a better control of intervening variables.

Table 3.Samples of supervisors of the private company in Lima according to the education level.

Participants	University tertiary education	Non university tertiary education	Total
Experimental group	6	7	13
Control group	6	9	15
Total	12	16	28

Research Techniques.

Technique employed to assess changes in achieving competencies. This research used the behavioral observation in real situations of work of supervisors and in simulated situations created in the training workshop. This was a systematic observation.

Measurement Instrument.

Two rubrics were constructed. One rubric was to measure competence of assertive communication and the other one to measure competence of teamwork.

These competence rubrics enable to measure the set of behaviors of social interaction shown in real work situations and also in simulated situations. Both measurement situations were significant and complement each other because it is not easy to naturally see all behaviors or attitudes including a competence to measure. For this purpose, in a workshop session, similar situations to the ones at work requiring different components of the competence under evaluation were planned. Levels to measure competencies are as follow: a) in the beginning (very few abilities regarding competence), b) in process (a few abilities regarding competence), c) achievement (sufficient abilities regarding competence) and d) highlighted achievement (many abilities regarding competence). See appendix.

Three measurements from different sources were contrasted: immediate heads, themselves and trainer responsible for this research. The level of competence achievement was determined according to the estimate level by the majority of assessors' scores.

Validation.

This rubric meets the validating criteria of three expert methodologists, with experience in the field of management, in organization and in the thematic field, which determine the validity of the contents. It was stated that rubrics constructed measure what they pretends to measure (see appendix B).

Reliability.

For instrument reliability process, a pilot sample was taken with 15 participants and the instrument reliability process was followed. For this purpose, the Cronbach's alpha technique was used from the data obtained, which is explained in detail below.

Table 4. *Reliability of the assertiveness and teamwork instrument.*

	Assertiveness	Teamwork	No. of elements
Cronbach's alpha	.849	.867	4

According to Table 4, the level of reliability of the instrument of assertive communication and teamwork competencies, processed by Cronbach's alpha technique is of .849 and .867, respectively. It means that the instrument has a high level of reliability; therefore, its application is suggested to present results.

"Manage your Talent" Program.

For the purposes of this research, the author of the research designed a "Manage your Talent" Program based on assertive communication and teamwork competencies.

Procedure.

The design and application of the program comprised the following phases:

- **Phase 1.** Review of the bibliography about human talent management programs. Furthermore, bibliography about work competencies evaluation strategy and technique.
- **Phase 2.** Construction of instruments and evaluation of assertive communication and teamwork competencies of supervisors in the private company in Lima.
- **Phase 3.** Design of "Manage your Talent" training program based on competencies to strengthen assertive communication and teamwork competencies of supervisors in the private company. Ten 4-hour sessions each one were applied with a frequency of twice a week. Sessions were conducted with interactive, participative and living strategies. Each session included three times: beginning, development and closing. The first time showed the topic and related to previous experience of participants. A cognitive conflict was generated through ludic strategic and dynamic questions to find out new answers. The second time showed the development which means the

central experience wherein problem situations were generated in respect of daily tasks and in relation to internal and external communication, as well as dramatization activities, role play, and others for teamwork. They needed to be solved in group and then they socialize. Finally, in the closing, metacognition on processes followed to develop a new ability was promoted as well as work and personal situations where they could apply them to achieve more success and individual and organizational satisfaction. They practice what they learned and received feedback from the immediate head and responded to self-assessment.

Phase 4. Application of the "Manage your Talent" Program. It was conducted from March to April, 2014 in a classroom of the premises of the private company in Lima with sufficient space for varied group training for cooperative work and ludic dynamics.

The Program based on competencies was developed with an experimental group of 13 participants. On the other hand, with a control group, routine training activities focused on conferences were worked at, with 15 participants.

Evaluation of the "Manage your Talent" Program results, based on competencies through achievements made and expressed through attitudes and abilities of assertive communication and teamwork of supervisors of the private company in Lima, in order to compare pre-test and post test results, between each group separately and between the experimental and control group.

The evaluation of effects was measured through rubrics applied to supervisors, immediate heads and contrasted with direct observation of the workshop mediator, for information triangulation:

Assessors –immediate head and self-assessment –failed to know whether participants under assessment belonged or not to the experimental or control group.

Results

Post-test comparison between the control and experimental group.

As seen in table 5, results obtained from the non-parametric table of Mann-Whitney test, with independent samples, state that Z is more than the significance level of 1.96 or ***P < .000, which means less than .05, and it represents that the alternative hypothesis is accepted. It involves that the application of the "Manage your Talent" Program has a significant effect on the assertive communication competence, in supervisors of the private company in Lima.

Table 5.Post-test comparison between the control and experimental group in the Assertive Communication competence of supervisors in the private company in Lima.

		ol group =15)		ental group n=13)	Mann Whitney U
Levels	Fi	fi%	Fi	fi%	-
Beginning	1	6.7	0	0.0	
In process	11	73.3	0	0.0	U = 3.5
Satisfactory	3	20	5	38.5	Z= 4.58 ***P < .000
Better than satisfactory	0	0.0	8	61.5	1 4.000

As seen in table 6, results obtained by the non-parametric table of Mann-Whitney test, with independent samples, state that Z is more than the significance level of 1.96 or ***P<.000, which means that it is less than .05, representing that the alternative hypothesis is accepted. It involves that the application of "Manage your Talent" Program has a significant effect on the teamwork competence of supervisors of the private company in Lima.

Table 6.Post-test comparison between the control and experimental group in the Teamwork competence of supervisors in the private company in Lima.

Levels		Control group Exp (n=15)		ental group =13)	Mann
	Fi	fi%	Fi	fi%	- Whitney U
Beginning	0	0	0	0	
In process	13	100	0	0	U = 0.00
Satisfactory	0	0	8	61.5	Z= 4.837
Better than satisfactory	0	0	7	38.5	***P < .000

Table 7.Post-test comparison between the control and experimental group in the Effective Dialogue ability of the assertive communication competence of supervisors in the private company in Lima.

Levels		ol group =15)	up Experimental group (n=13)		Mann Whitney U
	Fi	fi%	Fi	fi%	williney O
Beginning	1	6.7	0	0.0	
In process	11	73.3	0	0.0	U = 8.00
Satisfactory	3	20.0	4	30.8	Z= 4.111
Better than satisfactory	0	0.0	9	69.2	***P < .000

As seen in figure 1, after the program, regarding the effective dialogue ability, many supervisors of the control group are located at the in process level; by contrast many supervisors of the experimental group are located at a Better than satisfactory level.

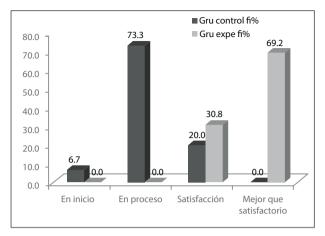


Figure 1. Post-test comparison between the control and experimental group in effective dialogue ability of the assertive communication competence of supervisors in the private company in Lima.

Feedback Ability.

As seen in table 8, results obtained by the non-parametric table of Mann-Whitney test, with independent samples, state that Z is more than the significance level of 1.96 or ***P < .000, which means to be less than .05, representing that the alternative hypothesis is accepted. It involves that the application of the "Manage your Talent" Program had a significant effect on feedback ability of assertive competence of supervisors in the private company in Lima.

Table 8.Post-test comparison between the control and experimental group in the Feedback ability of assertive communication competence of supervisors in the private company in Lima.

	Control (n=	•	Experimental group (n=13)		Mann
Levels	Fi	fi%	Fi	fi%	Whitney U
Beginning	1	6.7	0	0.0	
In process	9	60.0	0	0.0	U = 10.00
Satisfactory	5	33.3	5	38.5	Z= 4.983 ***P < .000
Better than satisfactory	0	0.0	8	61.5	F < .000

As seen in figure 2, after the program, regarding the feedback ability, many supervisors of the control group are located at the in process level; by contrast many supervisors of the experimental group are located at a Better than satisfactory level

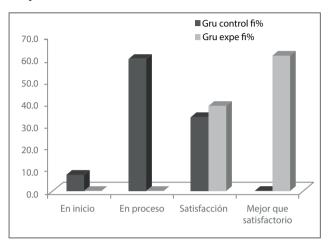


Figure 2. Post-test comparison between the control and experimental group in the feedback ability of assertive communication competence of supervisors in the private company in Lima.

Conflict Resolution Ability.

As seen in table 9, results obtained by the non-parametric table of Mann-Whitney test, with independent samples, state that Z is more than the significance level of 1.96 or ***P < .000, which means to be less than .05, representing that the alternative hypothesis is accepted. It involves that the application of the "Manage your Talent" Program had a significant effect on conflict resolution ability of assertive competence of supervisors in the private company in Lima.

Table 9.Post-test comparison between the control and experimental group in the Conflict Resolution ability of the assertive communication competence of supervisors in the private company in Lima.

		ol group =15)	Experimental group (n=13)		Mann Whitney U
Levels	Fi	fi%	Fi	fi%	Willianey O
Beginning	3	20.0	0	0.0	
In process	8	53.3	0	0.0	U = 21.00
Satisfactory	4	26.7	7	53.8	Z= -3.519
Better than satisfactory	0	0.0	6	46.2	***P < .000

As seen in figure 3, after the program, regarding the conflict resolution ability, many supervisors of the control group are located at the In process level; by contrast many supervisors of the experimental group are located at a Better than satisfactory level.

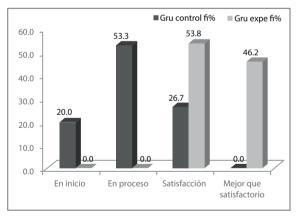


Figure 3. Post-test comparison between the control and experimental group in the conflict resolution ability of the assertive communication competence of supervisors in the private company in Lima.

Non-verbal Communication Ability.

As seen in table 10, results obtained by the non-parametric table of Mann-Whitney test, with independent samples, state that Z is more than the significance level of 1.96 or ***P < .000, which means to be less than .05, representing that the alternative hypothesis is accepted. It involves that the

application of the "Manage your Talent" Program had a significant effect on non-verbal communication ability of assertive competence of supervisors in the private company in Lima.

Table 10.Post-test comparison between the control and experimental group in Nonverbal Communication ability of the assertive communication competence in supervisors of the private company in Lima.

Levels	Control group (n=15)		Experimental group (n=13)		Mann
	Fi	fi%	Fi	fi%	- Whitney U
Beginning	5	33.3	0	0.0	
In process	8	53.3	0	0.0	U = 4.00
Satisfactory	2	13.3	4	30.8	Z= 4.338 ***P < .000
Better than satisfactory	0	0.0	9	69.2	P < .000

As seen in figure 4, after the program, regarding the non-verbal communication ability, many supervisors of the control group are located at the In process level; by contrast many supervisors of the experimental group are located at a Better than satisfactory level.

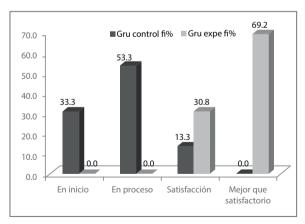


Figure 4. Post-test comparison between the control and experimental group in the Non-verbal Communication ability of assertive communication of supervisors in the private company in Lima.

Post-test Teamwork competence- Control and Experimental Groups. Ability of Establishment of the Topic or Issue to work at.

As seen in table 11, results obtained by the non-parametric table of Mann-Whitney test, with independent samples, state that Z is more than the significance level of 1.96 or ***P < .000, which means to be less than .05, representing that the alternative hypothesis is accepted. It involves that the application of the "Manage your Talent" Program had a significant effect on non-verbal communication ability of assertive competence of supervisors in the private company in Lima.

Table 11.Post-test comparison between the control and experimental group in the Establishment of the Topic or Issue to work at ability of supervisors in the private company in Lima.

		Control group (n=15)		ental group =13)	Mann	
Levels	Fi	fi%	Fi	fi%	Whitney U	
Beginning	1	6.7	0	0		
In process	11	73.3	0	0	U = 9.00	
Satisfactory	3	20	6	46.2	Z= -4.317 ***P < .000	
Better than satisfactory	0	0	7	53.8	1 < .000	

As seen in figure 5, after the program, regarding the establishment of the topic to work at ability, many supervisors of the control group are located at the In process level; by contrast many supervisors of the experimental group are located at a Better than satisfactory level.

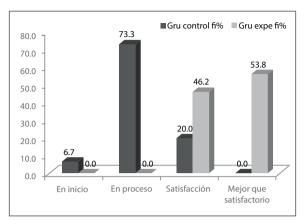


Figure 5. Post-test comparison between the control and experimental group in the Establishment of the Topic or Issue to work at ability of the Teamwork competence of supervisors in the private company in Lima.

Goal Achievement Ability.

As seen in table 12, results obtained by the non-parametric table of Mann-Whitney test, with independent samples, state that Z is more than the significance level of 1.96 or ***P < .000, which means to be less than .05, representing that the alternative hypothesis is accepted. It involves that the application of the "Manage your Talent" Program had a significant effect on the Goal achievement ability of teamwork competence of supervisors in the private company in Lima.

Table 12.Post-test comparison between the control and experimental group in the Goal Achievement ability of the Teamwork competence of supervisors in the private company in Lima.

Levels		ol group =15)			Mann Whitney U	
	Fi	fi%	Fi	fi%	whithey o	
Beginning	1	6.7	0	0.0		
In process	9	60.0	0	0.0	U = 15.00	
Satisfactory	5	33.3	6	46.2	Z= -4.025	
Better than satisfactory	0	0.0	7	53.8	***P < .000	

As seen in figure 6, after the program, regarding the Goal achievement ability, many supervisors of the control group are located at the In process level; by contrast many supervisors of the experimental group are located at a Better than satisfactory level

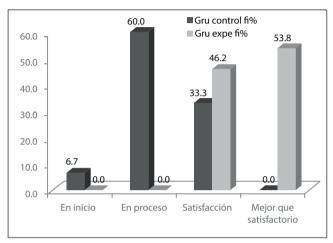


Figure 6. Post-test comparison between the control and experimental group in the Goal Achievement ability of the Teamwork competence of supervisors in the private company in Lima.

Democratic Environment Ability.

As seen in table 13, results obtained by the non-parametric table of Mann-Whitney test, with independent samples, state that Z is more than the significance level of 1.96 or ***P< .000, which means to be less than. 05, representing that the alternative hypothesis is accepted. It involves that the application of the "Manage your Talent" Program had a significant effect on the ability: Democratic environment ability of competence teamwork of supervisors in the private company in Lima.

Table 13.

Post-test comparison between the control and experimental group in the Democratic Environment ability of the Teamwork competence of supervisors in the private company in Lima.

		ol group =15)	•	ntal group :13)	Mann
Levels	Fi	fi%	Fi	fi%	Whitney U
Beginning	3	20.0	0	0.0	
In process	8	53.3	0	0.0	U = 12.00
Satisfactory	4	26.7	6	46.2	Z= -4.116 ***P < .000
Better than satisfactory	0	0.0	7	53.8	F \.000

As seen in figure 7, after the program, regarding the Democratic environment ability, many supervisors of the control group are located at the In process level; by contrast many supervisors of the experimental group are located at a Better than satisfactory level.

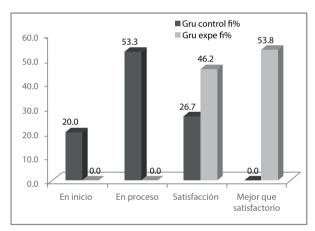


Figure 7. Post-test comparison between the control and experimental group in the Democratic environment ability of Teamwork competence of supervisors in the private company in Lima.

Decision-Making for Managing Consensus Ability.

As seen in table 14, results obtained by the non-parametric table of Mann-Whitney test, with independent samples, state that Z is more than the significance level of 1.96 or ***P < .000, which means to be less than .05, representing that the alternative hypothesis is accepted. It involves that the application of the "Manage your Talent" Program had a significant effect on the Decision-making for managing consensus ability of Teamwork competence of supervisors in the private company in Lima.

Table 14.Post-test comparison between the control and experimental group in the Decision-making for managing consensus ability of the Teamwork competence of supervisors in the private company in Lima.

		ol group =15)	Experimental group (n=13)		Mann Whitney U	
Levels	Fi	fi%	Fi	fi%	williney o	
Beginning	5	33.3	0	0.0		
In process	8	53.3	0	0.0	U = 7.00	
Satisfactory	2	13.3	7	53.8	Z= 4.325	
Better than satisfactory	0	0.0	6	46.2	***P < .000	

As seen in figure 8, after the program, regarding the decision making ability, many supervisors of the control group are located at the In process level; by contrast many supervisors of the experimental group are located at a Better than satisfactory level

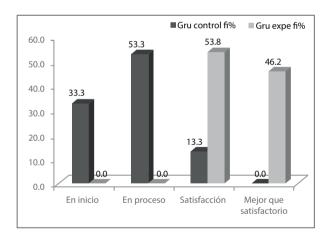


Figure 8. Post-test comparison between the control and experimental group in the Decision-making for managing consensus ability of the Teamwork competence of supervisors in the private company in Lima.

Hypothesis Test: Assertive communication.

According to results seen in table 15, before the experiment, comparison between pre and post test scores of the control group, we can see there is no significant difference between post and pre-test score, as seen in the

statistical significance value in comparison to the level of significance $(p > \alpha)$.066 > .05. However, results seen in the experimental group between pre and post-test scores show that there is a significant difference between post and pre-test scores, as shown in the statistical significance value in comparison to the level of significance $(p < \alpha)$, .001 < .05 which means that the research hypothesis should be accepted.

Table 15.Comparison of ranges and the level of significance of assertive competence – before and after.

		N	Average range	Sum of ranges	Z	Asymptotic Sig. (bilateral)
	Negative ranges	2 ^a	6,25	12,50	1,836 ^b	,066
POS_CON PRE_CON	Positive ranges	9 ^b	5,94	53,50		
	Ties	4 ^c				
	Total	15				
	Negative ranges	O ^d	,00	,00	3,194 ^b	,001
POS_EXP PRE_EXP	Positive ranges	13 ^e	7,00	91,00		
	Ties	0^{f}				
	Total	13				

Hypothesis Test: Teamwork Competence.

According to the results seen in table 16, before applying the Program, comparison between the pre and post-test score of the control group, show there is no significant difference between post and pre-test scores, as seen in the value of statistical significance in comparison with the level of significance (p > a) .066 > .05. However, results seen in the experimental group between the pre and post-test scores, after the program, shows a significant difference between post and pre-test scores, as seen in the value of statistical significance in comparison with the level of significance (p < a), .001 < .05, thus it means the research hypothesis has to be accepted.

Table 16.Comparison of ranges and level of significance of teamwork competence, - before and after.

		N	Average range	Sum of ranges	Z	Asymptotic Sig. (bilateral)
POS_CON	Negative ranges	2ª	6,25	12,50	1,836 ^b	,066
	Positive ranges	9 ^b	5,94	53,50		
PRE_CON	Ties	4 ^c				
	Total	15				
_	Negative ranges	O _d	,00	,00	3,207b	,001
POS_EXTE- PRE_EXTE	Positive ranges	13 ^e	7,00	91,00		
	Ties	O^{f}				
	Total	13				

Discussion

From the results obtained as a result of applying the "Manage your Talent" Program in assertive communication and teamwork competencies, significant changes are shown in the levels of achievement of those competencies; while not all of them were achieved in a very satisfactory level, the development of planned abilities and formation of attitudes appropriate to daily work, are evident in those competencies.

These results agree with Alles (2010) who showed a significant relation between competency-based training strategy adopted by the university and the results of the development of cognitive competencies in workers. Furthermore, they agree with the results obtained by Bueno (2004) who, in his doctoral thesis, analyzed all factors contributing to increase productivity of information professionals who develop their tasks in an informative company. In this way, he tried to show that a good management of human capital decisively causes an effect on informative company profitability improving thus competitiveness, increasing productivity, meeting social demands effectively and improving society services.

Regarding the assertive communication competence, we can state that participants of the experimental group achieved better achievement levels in

five points with reference to the average between both groups in comparison with the initial ones. Improved abilities exercised are evidenced. These differences can be attributed to the effectiveness of interactive strategies based on direct test of assertive abilities required in the supervising functions and represented in dramatizations, role play and dynamics. By contrast, in the control group, pre and post- measurements are similar. This strengthens the hypothesis that if training programs with involvement are not applied, changes in the assertive competence levels shall not be made, call of attention and talks possessed in this organization at that time shall not be sufficient. Differences in the experimental group were a result, mainly, of the program application that caused significant changes in the level of assertive communication competence level not other personal or work environment factors.

Furthermore, in respect of the assertive communication competence of supervisors of the private company in Lima, when comparing the post and pre results in the experimental group, we can see all ranges are positive, which means that changes occurred in all participants for the application of the Program; rather in the control group, ranges of ties and negative ranges are recorded, which involves the lack of changes. This is attributed to the fact that daily activities do not allow achieving assertive communication competence.

Upon comparison thereof, from the results of the post-test between the control and experimental group, these values were obtained: ***P < .000, U = 3.5 and Z = 4.58, which is observed in differences found between the control and experimental group. Regarding the first one – control group - the big majority of participants (73.3% of supervisors) obtained a level of achievement "In process", which evidences that neither maturation nor new daily experiences are sufficient to generate expected changes in levels of assertive communication competence, and practical opportunities and reflection about fundamental aspects to improve it are needed. On the other hand, in the experimental group, the big majority (61.5% of supervisors) is located in the level "Better than satisfactory". These differences are vast and can be mainly attributed to activities and interactive and ludic strategies of the program, in the form of workshops, where people were trained in listening, development of active listening, analysis of communicative barriers, pertinent expression of assertive messages, in an emphatic manner and with respect for differences in ideas and feelings, consistently with a non-verbal language that favored better comprehension of messages and, therefore, the fulfillment of common wellbeing.

Regarding the teamwork competence, "Manage your Talent" Program had a significant effect on supervisors of the private company in Lima.

Upon evidencing differences between pre-test and post-test of the control group, the difference is of 1.07, an insignificant change, which evidences that daily interaction in work environment does not cause to develop relevant abilities of that competence.

Upon comparison thereof, from the results of post-test between the control and experimental group, these values were obtained: ***P < .000, U = 3.5 and Z= 4.58, which is corroborated through differences found between the control and experimental groups. In the first group, all the participants (100% of supervisors) are located at the level "In process", which corroborates that daily experience of work is not sufficient to achieve better teamwork levels; on the contrary, in the experimental group, the big majority (61.5%) and 38.5% of participants) is located at the "Satisfactory" and "Better than satisfactory" levels, respectively. These differences are fewer that the ones found in the achievements of assertive communication competence; however we can clearly see a big change and development of abilities to better work in team. Those achievements are caused due to activities and strategies of the program, essentially focused on cooperative work, which analyzed processes followed in daily activities, designed consensus plans to improve those processes, through dynamics and dramatizations to give training in more effective ways of teamwork.

These results are confirmed with the findings of Niño y Flores (2009) who analyzes human resource management by competencies, in comparison with the traditional approach, components of competencies, competence models of organizations, value creation in human resource management, teamwork, performance evaluation methods, performance evaluation principles by competencies, performance evaluation process by competencies and, finally, chain of value. Thus concluding that human resource management by competencies is a medium to be successful.

Upon analyzing the abilities of assertive communication competence, from the findings of expected achievements, by applying "Manage your Talent" Program, the following can be stated:

With reference to the Effective dialogue ability, significance values obtained were ***P < .000, U = 8.00, Z = 4.111. This evidences that "Manage your Talent" Program had a significant effect on the supervisors of the private company in Lima. With the evidence it is corroborated that the majority of participants of the control group remained at the "In process" level (73.3 % of participants). This means that maturation or new daily experiences at work, by themselves, do not cause any changes in supervisors. On the contrary, the majority of the experimental group obtained a "Better than satisfactory" level (69.2 % of supervisors). These ability achievements resulted from activities of active listening, analysis of situations where critical judgments about aggressive and passive communication representations were issued and test of assertive expression of ideas and emotions, with opportunities to recognize, defend points of views in daily work situations and facing problems, as well as solution proposals.

These results from decision-making in teamwork are similar to the results explained by Vargas (2010) which evidenced that professors need reflective and cooperative group research processes sharing control and monitoring to meet tasks. Team decision-making enables to improve learning quality. On the other hand, achievements of pedagogical management of professor work through cooperative groups are equal than aspects worked at in the private company in Lima: reflection on practice to improve management processes oriented towards developing institutional climate and culture. Likewise, groups achieving a coordination level taken on objectives, vision – mission, values, pedagogical management processes and teaching work groups that achieve a cooperation level, answer to objectives, vision – mission, values, work groups approaching to the level of collaboration taken on as their objectives, vision – mission, values, and management processes.

Conclusions

1. There is a difference between pre-test and post-test of the experimental group regarding assertive communication competence wherein bigger

- achievements in post-test are evidenced. (z=3.194, p=.01). No difference in the control group.
- 2. There is a difference between pre-test and post-test of the experimental group regarding teamwork communication competence wherein bigger achievements in post-test are evidenced t. (z = 3.207, p = .01). No difference in the control group.
- 3. "Manage your Talent" Program was effective to increase the level of achievement of assertive communication competence (*Z*= 4.58 ****P* < .000) and teamwork competence (*Z*= 4.837 ****P* < .000.) The effect was bigger in the first abovementioned competence.
- 4. "Manage your Talent" Program was effective to develop abilities of effective dialogue, conflict resolution and non-verbal communication, which enabled to obtain better levels of achievement of the assertive communication competence. More significance on dimensions of effective dialogue and non-verbal communication was evidenced; less effective in conflict resolution.
- 5. "Manage your Talent" Program was effective to develop abilities of establishment of the topic, goal achievement, democratic environment, decision-making for consensus management. All of them enabled to obtain better levels of achievement of Teamwork competence. More significance on dimensions of the goal achievement and democratic environment was evidenced; less effective in the ability of decision-making for consensus management.

Recommendations

- 1. Analyze the program effects according to the variable of gender, to determine if the program is equally effective in women or men or not and; adjust characteristics of both genders.
- 2. Make decisions about talent management system of supervisors in the company, based on these results and the quality of this effective program. Conduct a follow up and feedback to ensure supported development of abilities promoted through "Manage your Talent" Program.

- 3. Disseminate strategies employed in "Manage your Talent" Program of this research to adjust them to the reality of other organizations, since it was planned by taking into consideration a theoretical, methodological basis, and professional experience of the author in personnel training.
- 4. Enhance strategies of "Manage your Talent" Program to achieve better increase of the following abilities: establishment of the topic, goal achievement, democratic environment and above all, decisionmaking for consensus management in order to obtain better levels of achievement of the Teamwork competence.

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Appendix A: Research instrument

Assertive Communication Rubric

Name:	
Profession/technical career:	Date:

Competence: Communicates by expressing emotions and ideas, serenely, firmly and friendly; seeks for making the other feel good; without affecting third people feelings; active listening to keep effective dialogues, with openness to different perspective and respect for differences.

CRITERIA	Better than satisfactory achievement (4)	Satisfactory achievement (3)	In Process (2)	Beginning (1)
Effective dialogue	Begins, keeps and ends dialogues according to own needs and third parties' needs, with emotional regulation. Expresses precisely points of view and takes into account third parties' points of view. Includes requests for improvement of functions with the corresponding emotional regulation. Asks for necessary support to improve work and expresses disagreement with friendly and conciliatory words when irrational petitions are made.	Begins, keeps and ends dialogues according to own needs and third parties' needs, expressing precisely points of view and takes into account third people ideas and emotions. Includes making petitions to improve functions. Asks for necessary support to improve work and expresses disagreement serenely when irrational petitions are made.	Begins, keeps and ends dialogues according to own needs; but without taking into account third parties' needs, expressing precisely points of view. Sometimes, takes into account some ideas and emotions from others. Asks for support in a disturbed manner to improve work, shows signs of displeasure; but stays calm to avoid problems.	Evidences difficulty to begin, keep and end dialogues according to own needs; expressing precisely points of view. Sometimes, takes into account some ideas and emotions from others. Fails to express points of view if he dislikes some things and he does not ask for necessary support to improve work. Too difficult to say "No".

Constructive feedback	Explains the other his points of view about performance observed; makes emphasis on strengths; praises the other for effort shown or achievement obtained. Poses questions to reflect about what should be improved or if any doubt or if he does not know anything to conduct activities and achieve purposes or solve work problems.	Explains the other his points of view about performance observed; makes emphasis on strengths; sometimes praises the other for effort shown or achievement obtained. Poses questions when he has any doubt or does not know anything, to conduct activities and achieve purposes or solve work problems.	Asks the other about performance observed, or if any doubt or if he does not know anything; but he does not express opinions or an activity to undertake or a problem to solve.	Avoid posing questions despite he needs to pose them to achieve purposes or solve work problems.
Conflict resolution	Solve interpersonal conflicts serenely, seeking that both parties win by showing his emotions are understood and experiences empathy. If necessary, he gives up for common benefit.	Solve interpersonal conflicts serenely, seeking that both parties win by showing his emotions are understood and experiences empathy. If necessary, he gives up for common benefit.	Solve interpersonal conflicts, imposing his ideas by yelling or remaining silent leaving the other side to win to avoid problems.	Personal conflicts are not solved. Yells a lot or communicates his discomfort with indirect talks, swearwords affecting others, if something occurs which causes anger, or he goes out for not to face work problems that need to be solved.
Non-verbal communication	Makes eye contact and approaches in a regulated manner, by means of laughs, gestures with the head, hugs and slaps with love or recognition or consolation coherent with the message he desires to express and with the situation itself.	Makes eye contact and a little of proximity in a controlled manner, by means of laughs, gestures with the head, hugs of recognition consolation coherent with the message he desires to express and with the situation itself.	Replies with a gesture or voice of discomfort, rejection or mockery, when others ask him something he is not in agreement with or makes observations to his work, which are less coherent with the situation itself.	Expresses gestures, laughs, rejection incoherently with the message and situation.

Appendix B: Research Instrument

Teamwork Rubric

Name:	
Profession/technical career:	Date:

Competence: Interacts, in a coordinated and organized manner, in the team by presenting ways of action, giving opinions and listening to third parties' proposals. Looks for a consensus or conciliation with proposals, performs responsibilities and favor their performance by other members until achieving, jointly, expected goals of common benefit by respecting differences.

CRITERIA	Better than satisfactory achievement (4)	Satisfactory achievement (3)	In Process (2)	Beginning (1)
Establishment of the topic or issue to work at	Determines precisely the issue. Proposes initiatives for meeting in a team. During the meetings, gives first initiatives, persuades and causes enthusiasm on the significance to face a new problem so that others can accept and support them.	Determines precisely the issue. During the meetings, gives first initiatives, persuades and causes enthusiasm on the significance to face a new problem so that others can accept and support them.	Determines in general the issue. During the meetings, gives a few initiatives; sometimes persuades about the significance to face a new problem so that others can accept and support them.	During the meetings, fails to give initiatives, does not persuade about the significance to face a new problem, or looks for their acceptance or support.
Goal achievement	In a team, acts in an effective and satisfactory manner towards everybody until obtaining expected products or solving a work problem. Gets a high common benefit.	In a team, acts in an effective and satisfactory manner towards everybody until obtaining expected products or solving a work problem. Gets a common benefit.	In a team, for him it is hard to act in an effective manner towards everybody until obtaining expected products, causing sometimes a work problem. Sometimes he gets a common benefit.	In a team, he cannot act in an effective manner towards everyone; he cannot obtain expected results; arises out work problems.

Democratic environment – Expression of opinions	Expresses his ideas in a group and argue them with two or more valuable reasons to achieve the goal, respecting others, for better application of processes, to follow up organized procedures in the use of machines and/mix of elements to achieve a better product and/or service.	Expresses his ideas in a group by giving a valuable argument to achieve the goal, respecting others, for better application of processes, to follow up organized procedures in the use of machines and/mix of elements to achieve a better product and/or service.	Expresses his ideas in a group; however he raises his voice when finding out contradictions, and giving contributions to a better application of processes and/or mix of elements; he looks for the easiest thing to do rather than a best product and/or service.	Expresses his ideas in a group trying to impose them or remains silent; his comments are not oriented towards giving contributions for better application of processes and/or mix of elements; he looks for the easiest thing to do rather than a best product and/or service.
Decision- making for consensus management	Listens to carefully, in silence and looking at his speakers without making rushed judgments and asks for focusing on objectives and work activity; asks for opinions on work; expresses his opinions and considers different points of view to reach consensus.	Listens to carefully, in silence and looking at his speakers without making rushed judgments, expresses opinions on work and considers different points of view to reach consensus.	Listen to with little attention, in silence; however sometimes he makes rushed judgments when others give opinions on work and considers different points of view and, sometimes, reaches consensus.	Do not listen to. Only focuses on messages, interrupts when others speak; makes rushed judgments when others give opinions on work and; do not consider different points of view; therefore arises out discrepancies.