

Multidimensional analysis of relevance. Case study of an intervention model with a differential approach

Análisis multidimensional de la pertinencia. Estudio de caso de un modelo de intervención con enfoque diferencial

> Gustavo Rincón¹* https://orcid.org/0000-0001-9683-3637

Nathaly Jimenez** https://orcid.org/0000-0001-9521-1246 Michelle Castrillon** https://orcid.org/0000-0003-2467-8361

DOI: https://doi.org/10.35622/j.rie.2020.01.006

* Servicio Nacional de Aprendizaje SENA, Bogotá – Bogotá, Colombia ** Universidad del Valle, Bogotá – Bogotá, Colombia

Received 18/12/2019/ Accepted 27/01/2020 Published 31/01/2020

ORIGINAL ARTICLE	The academic literature has demonstrated the relevance of education not only on the
KEYWORDS	economic development of society but also on the human and cultural development of individuals. That is why, one of the main challenges of governments is the access of
Social equity, job training, relevance, population exposed to conflict, vulnerable population.	individuals of different population groups to education and its quality, the search for the relevant sea according to the economic, historical, social and cultural context. In this sense, this document seeks to analyze the relevance of some training programs offered under an intervention model focused on the population, based on the set of factors important for the development of the individual and society, implemented a multidimensional approach that includes the educational-pedagogical, the social in conjunction with social and cultural equity, finally, the economic, institutional and political. This analysis is complemented by the description of the behavior of the apprentices, specific in their cooperative attitudes and integral biases, based on the application of experimental and behavioral economics techniques.
PALABRAS CLAVE Equidad social, formación para el trabajo, pertinencia, población expuesta al conflicto, población vulnerable.	La literatura ha demostrado la relevancia que tiene la educación no solo sobre el desarrollo económico de una sociedad, sino también en el desarrollo humano y cultural de los individuos. Es por esto, que uno de los principales retos de los gobiernos es garantizar el acceso de los individuos de diferentes grupos poblacionales a la educación y su calidad, buscando que esta sea pertinente según el contexto económico, histórico, social y cultural. En este sentido, este documento busca analizar la pertinencia de algunos programas de formación ofertados bajo un modelo de intervención focalizado a atender población vulnerable o expuesta al conflicto, sobre la base de un conjunto de

¹ Correspondence: grincon54@misena.edu.co



factores relevantes para el desarrollo del individuo y de la sociedad, implementado un enfoque multidimensional que comprende lo educativo-pedagógico, lo social en conjunto con la equidad Social y cultural y, por último, lo económico, institucional y político. Este análisis se complementa con la descripción del comportamiento de los aprendices, específicamente en sus actitudes cooperativas y los sesgos integrales, a partir de la aplicación de técnicas de economía experimental y del comportamiento.

1. INTRODUCTION

The signing of the peace agreement in 2016 brought with it a series of challenges for the Colombian State, such as promoting the integration of the regions, the social, economic and equitable development of the country, as well as the comprehensive inclusion of ex-combatants. In this sense, the strengthening of education in terms of access and quality is a fundamental part of this inclusion process, since education represents one of the essential mechanisms to contribute, not only to economic development but also to personal growth and strengthening and in Ultimate to the development of society, also transmitting its values and culture (Malagón, 2006; UNESCO, 2008).

In this context, the SENA National Apprenticeship Service, as a training institution for work and human development (Ley 1064, 2006) and in fulfillment of its mission, becomes one of the fundamental actors to boost the actions proposed in the peace agreement. For this reason, the Service Technology Management Center (CGTS by its acronym in Spanish)² From the Integral Vocational Training Model (FPI)³, it designs the SENA Integral Intervention Model (MSII) to promote the human and socio-economic development of vulnerable population and population exposed to the conflict (ex-combatants and victims of the armed conflict). The above, given the need to respond to the current social demand and the possible limitations derived from conditions associated with poverty and inequality that this population faces to fully develop their training process since they do not have the resources to access support tools that allow them to develop their basic skills (Terigi, 2009; Ramirez, 2010; Santos, 1998).

² The CGTS is one of the training centers that are part of SENA. It is located in Cali - Valle del Cauca and provides technical, technological and complementary training, both face-to-face and virtual, in the areas: Hospitality, Tourism and Gastronomy, Commerce, Administration and Finance, Health and Personal Services, Physical Activity, Logistics and Management of Industrial and Environmental Production, serving mostly young people from vulnerable and low-income populations of the city and nearby municipalities such as Yumbo, Vijes, Tuluá, Dagua, Jamundí and La Cumbre.

³ The Comprehensive Vocational Training Model implemented by SENA is a pedagogical proposal based on the human development of apprentices theoretical and practical educational process of an integral nature, through which the person permanently acquires and develops knowledge, skills, and aptitudes and identifies generates and it assumes values and attitudes for its human fulfillment and its participation, critical and creative in the social and productive world

However, the MSII consists of three stages, in which the apprentices begin the training programs with a vocational and technical training focused on the contents of each course, which is aligned with some educational projects that have been developed where it is observed that education plays a fundamental role in the reintegration of ex-combatants into civilian life (Harris y Mische, 2004; Observatorio de Procesos de Desarme, Desmovilización y Reintegración, 2009). Subsequently, they develop a second component that addresses peace culture⁴ themes that are complemented by a third component that seeks to develop soft skills in apprentices through sport, called "DEPORPAZ". This last component consists of the specific practice of the sport "Tug of War", which involves within its characteristics, elements that favor the development of soft skills becoming a kind of mechanism to reduce the social gap between different types of population and contribute thus to an effective reintegration of ex-combatants and victims (Diaz y González, 2001; Moscoso, Pérez, Muñoz, González, y Rodríguez, 2013; García, Gutiérrez, González y Valero, 2012).

The programs that were initially offered under the MSII were technical level programs for which a review of the context, skills to be developed and graduation profiles of each program was carried out, taking into account that these involve a series of competencies and learning outcomes that it was necessary to adjust to the social demand and the life history of the target population, however, the offer was subsequently adjusted and complementary courses were added, given that the population expressed inconvenience regarding the intensity of the training schedule, prohibiting them from joining to the technical program.

An additional challenge arises in the strengthening of education directly related to its quality, relevance, as it is one of the aspects with which the duty to be and the relevance of education is defined or in this particular case, training for the job. However, relevance has been a difficult phenomenon to address, according to UNESCO (1998) relevance requires the construction of a joint vision of the future and the needs of the context, it must also be implemented according to social expectations and actions developed by the institution. Accordingly, the activities carried out should be aimed at solving social problems, not only focused on the modernization of higher education in the workplace or the supply of qualified human resources (Sutz, 1997; Gibbons, 1998) but also depending on the underlying inconveniences such as poverty, intolerance, respect, care for the environment, the promotion of peace, among others.

⁴ The culture of peace component is included in the model, given the importance that people formation are contextualized on social, national and global realities and to that extent contribute from their area of knowledge with actions that generate an impact on their immediate environment (Higuera, 2018).

However, taking into account that education promotes individual and social development, the relevance of education must also involve in its analysis aspects that address both-way needs (Martuscelli and Martínez, 2002; García, 2002; Malagón, 2009), as well as finding a balance between the needs of the productive sector and the economy, the needs of society as a whole and the individual as a human being, within a historical, economic, social and cultural context (Tunnermman, 2000; Days, 2008).

This document seeks to analyze the relevance of the aforementioned training programs, based on a set of factors relevant to the development of the individual and society, implemented a multidimensional approach that includes the educational-pedagogical, the social in conjunction with Social and cultural equity and, finally, the economic, institutional and political (Tunermann, 2000; Malagon, 2006). In turn, this analysis is complemented by the description of the behavior patterns of the apprentices that were derived from the intervention of the MSII, specifically in their cooperative attitudes and integral biases, bearing in mind the theory of social identity proposed by Tajfel and Turner (1979) in which they determine three main ideas that are categorization, identification, and comparison, which give way to generate stereotypes and favoritisms in a population.

In this sense, this article consolidates the results found in the project "Evaluation of two components of the SENA model of integral intervention for human and socioeconomic development of people in the process of reintegration and /or victims of the armed conflict located in the valley of the Cauca 2018 "presented to the 2018 Sennova call, which had as a product a book⁵ in which one of two components is evaluated, the relevance. In this case, the detailed results in a said product are complemented by the behavior findings.

2. METHOD AND MATERIALS

Taking into account that this research seeks to analyze the relevance of job training programs under the MSII for the vulnerable population, ex-combatants, and victims of the armed conflict, the methodology implemented consists in the first instance, in carrying out a documentary analysis to different secondary sources. in which the relevance is defined and analyzed, to establish the dimensions on which it will develop its analysis, following the methodology that Peña (2006) synthesizes for the implementation of this technique.

⁵ The book was called "Relevance of the academic programs offered by the SENA to the reinserted population, reincorporated and victims of the Colombian armed conflict", was written by instructors Gustavo Rincón and Jhon Jairo Angarita and published in 2019.

On the other hand, to examine the relevance in the programs understudy, a qualitative analysis of data collected was carried out based on the implementation of semi-structured interviews with apprentices, instructors and executives of the CGTS, having as a methodological reference the exercise proposed by Mendoza (2018) on the social relevance of the educational inclusion program for adults in the municipality of Candelaria in Valle del Cauca.

In the second instance, a descriptive quantitative analysis was carried out; These data were obtained through the application of experimental and behavioral economics techniques to the population benefiting from the training programs, sessions were run in which experimental games were developed to measure their cooperative attitudes and biases.

The development of this data analysis was carried out for the programs offered in the implementation of the MSII, in which technical level programs (four groups) and complementary courses (10 groups) were executed, facilitating the linking of the type of target population in 14 groups with an average of 25 apprentices in each. The technical level programs were Rural Accommodation Operation, Environmental Management (two groups) and Sales of Products and Services (two groups) for a total of four groups, while the complementary courses were Tourism (one group), Sales (four groups) and Cooking (five groups).

Methodological design

Initially, to establish the documentary analysis of secondary information around social and educational relevance, a review of the state of the art was carried out, in addition to the construction of a conceptual framework on which it was possible to define the analytical categories that allowed integrally describing the relevance. Based on this review, the conception of Malagón (2006) is taken as the main orientation, which in turn includes what was stated by Tunnermann (2010) where it is clear that in addition to the feedback relationship that should exist between educational institutions and the productive sector, these dynamics must also be reflected about the State, the social sectors and the value system of a society. For this reason, the categories described in Table 1 were defined to track and illustrate this concept.

Categorical approaches	Definition	Categories
Institutional	It deals with the analysis of the processes developed by the institution that imparts the training, the ideas about its social function, the disposition of resources. etc.	PEI Institutional Educational Project goals
		C

Table 1. Analysis categories for documentary review

Gustavo Rincón; Nathaly Jiménez; Michelle Castrillón

Categorical approaches	Definition	Categories
Political	It focuses on the commitment or approach to solving social problems.	Institutional design Investigation Social projection
Educational- pedagogical	This is specifically aimed at the academic and pedagogical part, the curricular contents and the way they are taught. How the educational and learning process is approached.	Pedagogical model Academic Offer Methodologies
Social	Integral training of the student, in relation to values, social ethics, the sense of belonging to a community, with the human	Values Sense of belonging Soft skills Student context
Social equity	It is based on reviewing the opportunities it offers to overcome the conditions that hinder the training possibilities	Access Opportunities Desertion Institutional support
Cultural	It focuses on the recognition of the human context, customs, assessments.	Activities Groups to which it belongs Family context
Económica	It is related to the opportunities of labor insertion that it generates, the articulation with the productive sector, the recognition of the economic environment in which it develops.	Economic sectors in development Needs and expectations of the productive sector

The review of different authors that define and delimit the concept of relevance, under the categorical approaches, related in Table 1, allowed to define the concept of relevance that will be addressed for the analysis of the SENA Integral Intervention Model programs. On the other hand, in the analysis of qualitative and quantitative data collected, it involved the development of two stages achieved thanks to the fieldwork carried out.

The first consisted of the application of experimental instruments, for which the trainees needed to sign an informed consent in which they were assured that their decisions were completely anonymous and would only be of investigative use, additionally they were informed that their decisions would be real and are incentivized through points that could later be exchanged for materials such as notebooks, pens or other school supplies.

The public goods game was adopted for the analysis of cooperative attitudes, since this game allows individuals to face a social dilemma in which they must decide between individual or social interest, in addition this type of games covers goods that do not exclude to others of its consumption, neither the consumption of one person reduces the level of consumption of the other. (Cárdenas, 2004; Ostrom 1999). These types of games have been implemented in other countries such as Burundi, Sierra Leone, Kosovo, Libya, and even Colombia to study the behavior of individuals, discrimination and even their social norms. (Bogliacino et al 2017; Voors et al 2012;

Vollhardt, 2012; Mironova and Whitt, 2016; Hartman and Morse, 2016; Craig and Richeson, 2016; Bauer et al 2016; Gilligan et al 2013).

Continuing with the procedures that were carried out, it is worth mentioning that they were asked to answer an initial questionnaire of 28 questions, for which they received 5.000 points, this allowed to know their sociodemographic characteristics, social, physical and emotional attitudes.

However, in the game the participants received 15.000 points at the beginning of the activity and were told that they were going to be randomly matched with another person and the only available information they had of that person is that they could be a victim of the conflict, a ex-combatant or someone of vulnerable population, considering that they had to decide how much to send to a group account in which for every 5.000 points, the researchers would put 2.000 additional points and in the end, the total points existing in the group account was divided between two players. It should be clarified that the earnings of each one depended absolutely on the decisions they will make and corresponded to the sum of what each individual will leave in their individual account plus what they will earn in the group account. On the other hand, the strategic method (Selten, 1967) was used to capture the cooperative attitudes, favoritisms, and stereotypes of the participants regarding the types of population to which the individuals with whom they are potentially matched belong.

The second stage was carried out through the implementation of interviews with the actors that were part of the process from the application of a non-probabilistic sampling that agreed to convenience sampling and avalanche or snowball sampling. The type of interview applied was semi-structured, since it allowed to have a questionnaire with main questions and the possibility of introducing new questions, depending on the direction the interview was taking, the information provided by the informant or the specific need of the researcher (Kvale, 2011).

Thus, based on the categories defined in the theoretical construction and state of the art, an instrument was designed for each type of actor, which addressed the theme and defined category. The key actors defined were those who mainly intervene in the training process as instructors, apprentices and officials. The numbers of interviews were defined according to the amount of population immersed in the pilot test process according to the implementation of convenience sampling and snowball. The following describes the number of interviews conducted by actor and inclusion factor:



Key Actor	Inclusion factors	Quantity
Trainees	Belonging to the groups in formation within the project	25 (5 for each group)
Instructors	Those who provide training to apprentices of groups in formation within the project, including group leaders	
	Academic and Mission Coordinators	2 (academic and missionary)
Civil Servant	Wellness	1 social worker
	Pedagogical support team	3 pedagogues
	Apprenticeship contract	1 professional
Total, applied interviews		44

Table 2. Number of interviews applied per actor and according to inclusion factor

3. RESULTS AND DISCUSSION

3.1. Multidimensional analysis of the relevance of training programs offered under the SENA Integral Intervention Model (MSII)

Taking into account the categories defined for the documentary analysis of secondary information on the concept of relevance, from different perceptions, the approach addressed in this research is a comprehensive approach capable of recognizing the theory-practice relationship (PEI curriculum proposal - practice curriculum) and the relationship between the training process and society, but also its relationship with the contributions and cultural, economic, pedagogical political interactions, recognizing the feedback dynamics that must exist between educational institutions and the State, the productive sector, the social sectors and the value systems of a society (Malagón, 2006).

In this sense, the approach assumed in the study integrates the concept of relevance about eight dimensions proposed in the seminar "Towards an Agenda for Higher Education in Colombia" promoted by the Colombian Association of Universities (ASCUN by its acronym in Spanish) in 1997. However, these dimensions were consolidated into three components, by the categorical approaches initially proposed based on what was presented by Malagón (2006) and Tunnermann (2010).

Dimensions	Concept	Categorical approaches	Shaped component for analysis
Relevance of the educational- pedagogical	New pedagogies (innovation in the educational field) that derive in institutional relevance	Educational- Pedagogical	Educational- Pedagogical
Integral student training	Training that involves values, social ethics, sense of belonging to a community, with the human, beyond the cognitive domain.	Social	Social, Social and Cultural Equity
Relevance of the social equity of development.	Social expansion of coverage, democratization of access and achievement opportunities	Social equity	Social, Social and Cultural Equity
Cultural relevance	"Strengthening national identity, rescue and valuation of cultural and regional heritage and creativity, promotion of multiple forms of expression / artistic creations; free cultural offer of various sociodemographic groups, various age groups"	Cultural	Social, Social and Cultural Equity
Relevance of assessing relevance	Address the analysis of the relevance of institutions, systems, in relation to their projects, objectives, needs.	Institutional	Economic, Institutional and Political
Relevance with the rest of the education system	Fulfill the responsibilities of being a guide in educational matters in front of the whole system. Assume the leading role in the renovation of the entire education system. Staff training, socio-educational research, new technologies.		Economic, Institutional and Political
Political relevance	Ability to present alternatives, to build solutions, to generate social relevance.	Political	Economic, Institutional and Political
Relevance with the productive sector	To meet the demands of the economy and in close relationship with scientific-technological development.	Economic	Economic, Institutional and Political

Table 3. Consolidation of components for the analysis of social and educational relevance.

Fuente: Malagón (2006) y Tunnermann (2010).

3.1.1. Quantitative analysis

Descriptive data of sociodemographic characteristics

In the first instance, it should be mentioned that the experimental sessions were carried out with 258 trainees, who formed the training programs shown in Table No. 2. Within the sample, the population was classified into three types: victims of armed conflict (77), persons in the process of reinstatement (7) and vulnerable population (174), the latter included those belonging to an ethnic minority, head of household and disabled mothers. In this sense, taking the concept already defined, Labrunée & Gallo (2005) consider that social vulnerability is manifested in that population that is affected by economic, political and social changes. In addition, Estivill (2003)

states that this vulnerability is composed of problems such as unemployment, school dropout, lack of economic resources, etc.

Nivel	Academic Program	# of trainees
	Rural accommodation	21
Technical	Environmental management	23
	Sales and services	27
•	Cooking	92
complementary	Tourism	29
course	Sales	66
	Total	258

Table 4. Number of trainees surveyed

Although it is true, SENA opened its programs with the objective of generating social inclusion and contributing to the well-being of the community, according to the data obtained, it is possible to observe that 41% of the population identifies as mestizos, 29% as Afro-Colombians , 16% as whites, 8% as indigenous, 2% as mulatto and the remaining 4% do not recognize themselves in any of the groups mentioned. In that same sense, chart No. 1 shows this classification, differentiating by type of population.

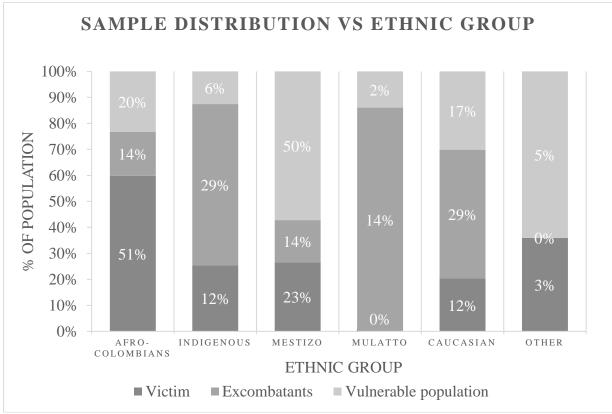


Figure 1 Population distribution vs ethnic group

However, regarding various characteristics of the sample, it is found that the majority of the beneficiaries were women with 62.02% and 37.98% were men. Likewise, it was obtained that the average age was 33 years, the minimum age was 15 and the maximum age was 75 years. It is worth mentioning that in relation to the socioeconomic stratum⁶ 82.75% of people belong to stratum 1 and 2.

On the other hand, the analysis indicates that the beneficiary population has been exposed to different types of violence both at the individual level (66.15%) and at the family level (71.6%). However, the relevance of involving the population that has not been directly affected by the conflict is clear here, as this allows closing social gaps between the community.

Descriptive analysis of cooperative attitudes and intergroup biases

According to the sample, it was found that the average contribution is higher towards people in vulnerable conditions (11219.1), followed by those who are victims of the conflict (10059.8) and finally the average contribution towards the ex-combatants (7629.48). Graph No. 2 shows the results of the average contributions, in which there is a bias towards ex-combatants and a favoritism of the sample in general for cooperating more with those who belong to the vulnerable population.

⁶ According to the National Administrative Department of Statistics (DANE), the socioeconomic stratum refers to the classification of households in Colombia, based on the characteristics of the dwellings and their urban or rural environment, in which the housing is related to the environment as a representation in a socioeconomic way. This classification consists of six strata that can be seen as an approximation to the hierarchical socioeconomic difference (from poverty to wealth or viceversa). Thus, strata 1, 2 and 3 correspond to low strata that house users with lower resources and strata 4, 5 and 6 correspond to high strata that house users with greater economic resources.

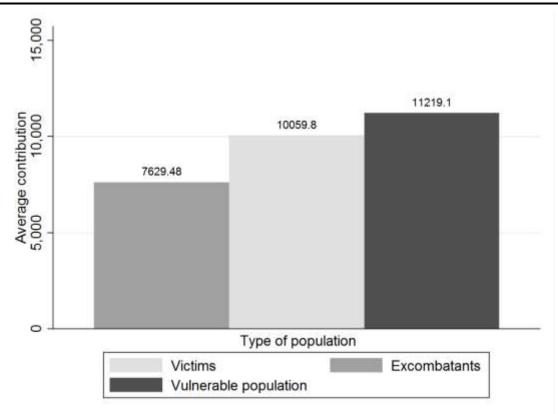


Figure 2 Population distribution vs ethnic group

Finally, the participants affirm on a scale of 1 to 5^7 to be willing to undertake new projects on average at 4.43, while when asked about their ability to lead, the average value indicated by the participants is only 2, 67 on a scale of 1 to 5. Which indicates that it is likely that it is necessary to empower or direct the teaching in the development of skills around leadership.

3.1.2. Qualitative analysis

In this section, the perceptions and concepts derived from the interviews applied to apprentices, instructors, officials and managers will be related around the components defined for the analysis of the social and educational relevance of the programs taught through the SENA Model of Integral Intervention.

Educational-pedagogical Relevance

Focusing the analysis on the educational-pedagogical component it is possible to think that in matters of methodology the instructors were redesigned, so that their students adopted the knowledge in an effective way, taking into account the type of population, the most appropriate

⁷ La escala señalada de 1 a 5 en estas preguntas indicaba el nivel de frecuencia con la que el participante realizaría una acción, siendo 1 nunca y 5 muy frecuentemente.

way should be sought achieving that the pedagogy implemented would yield the expected fruits at the end of the training, since there were deficiencies at the academic level.

Regarding the subject, the pronouncement by the instructors was:

"(...) More didactic strategies are used, that only theory, books, no, then videos, we did a reading, but then they don't know how to read very well, then it was time to make them understand reading, that is, learning It has to be more guided, it is not as autonomous as one can do with a boy who already has a bachelor's degree, can read, can write, they did not know how to write well, some did not know how to read, and did not know how to express themselves in public" (Interview instructor 1).

Therefore, teaching carries a responsibility not only in the broad knowledge that an instructor must possess but also in the strategy he uses to extend it to his apprentices, since the theory is a relevant point but the methodology with which it is developed is key. The instructors share this thinking, a clear example was obtained from one of the interviews in which it is stated that: "(...) share with them in the first place very aspects of reality, not so much the theoretical context of the programs, but land them in real situations, bringing them closer to reality, because in another way it is difficult to teach, that is, with them you must put yourself in the shoes and land on their plane" (Interview with instructor 2).

In accordance with the above, SENA has developed a strategy from the administrative side of what is the best way to serve this type of population. The answer was as follows from an official:

> "(...) Is an integral model that seeks that all the services that the Seine offers, are given at different times, but articulated, for example, we give training, but we also have the development of soft skills through deporpaz, but also to in turn, the entrepreneurship component is being worked on, but also the employability component and already the components that have to do with research, to summarize, it is a model that articulates the different services that the Seine provides, especially aimed at the population, not independently but articulated" (Interview with civil servant 1)

Namely, the opinion of the apprentices is an important attribute to define the relevance around the educational-pedagogical, since the demand and the academic offer is of great relevance for the analysis, given the relation between these with the interest and success within Of the information. Regarding this, the evidence allows to affirm that for the apprentices it has been gratifying not only the technical content of the program but also its additional components. An example of this is:

"(...) All the competencies have seemed very good to me, because they all have different points of view and the teachers are good. They all seem interesting. If they put me to choose one, it would be like the most important one, it would be ethical, it seems great because there, despite being intelligent, people must have defined values to provide good customer service. And minor, no. They're all good. Even physical education is fighting us hard to see that teamwork is important and union is important. Aid for cooperation, teamwork" (Trainee Interview 1)

Finally, it should be noted that there are a number of key needs in the process, such as: an improvement in vocational guidance that allows an adequate selection of the training program, an initial diagnosis of the population's conditions at the educational and social level, followed of a leveling of the preliminary knowledge necessary to take a technical course and finally, perhaps a standardized teaching methodology strategy that combines theory with practice.

Social Relevance, Social and Cultural Equity

According to various interviews with instructors and officials, it is possible to consider that the target population is in a situation of distance from the training processes, the interaction with the institutions and the society itself, in this way the apprentices present problems to adapt to institutional dynamics, to comply with times and deadlines, to understand the procedures established for the different procedures within the SENA and even the way in which they relate, address others or recognize the authority. Which requires additional support from the Welfare area, where attitudes of customer service and others are worked, along with the development of being. In relation to this, certain behaviors that officials and instructors manifested, such as the following were evident:

"(...) sometimes it is difficult for them to receive the orders, we had some that cost them, they had difficulty adapting to schedules, suddenly adapting to the workplace, it gave them difficulty, then they had only been a month and not I don't like how they treat me, I don't like how they look at me, I don't like it like this" (Interview with civil servant 2).

"(...) The way to express yourself is very rough, it is very rough, it tends to be rude, not with rude words, but the way in the tone of voice and stuff, that was the first difficulty that I had, but already as at 2 weeks that one begins to observe them, one realizes that they are not rude, they always grew up like this" (Interview with instructor 2).

In turn, it is recognized that the SENA within the process generated an impact on a personal level in the apprentices, the instructors on their part perceived that for them SENA is more than an institution: "(...) within the things they said it was that in the house could not find a family, and that family could find it there" (Interview with instructor 3).

Similarly, another instructor considers that:

"(...) SENA was an opportunity to get out of that world, from that sphere where they were, and also not only the opportunity to study, but also that they can start their business with entrepreneurship, for example, there is an apprentice that she wants to set up her hostel, then with the project she was helped to carry out the project, and now she is doing the process to make it happen to the Seine to undertake, or in the same way to look for other forms of financing for her to overcome, then not only they He taught them to be workers, but also so that they could undertake, so it is an opportunity, and a way of seeing things differently, how to get out of that world, that context where they normally are..." (Interview with instructor 1).

Likewise, the social worker states that she perceived in the apprentices that:

"(...) They open a door of hope for the working world and with it goes the quality of life of their families, they are people that I talked about, with many of those that I talked about, they told me their life story, I identified that it is a life opportunity, they feel it is a time for them to start again, social opportunities, because they already feel people who can help a neighbor, a partner, and create a positive strategy" (Interview with civil servant 2).

Thus, relevant results were presented in the training process, recognized by the instructors, one of them was expressed as follows:

"(...) But a very warrior woman, she overcame herself, she at first could not speak in public, she was very sorry, she could not express herself, she told me that she was not able to do it, but very intelligent, she even knew more companions, but when I passed along it was totally blocked, I had a very low self-esteem, and when we left, when it was the presentation of their project, I was terrified to see how it was expressed, but that is not achieved without the help of well-being, without the instructors having been there" (Interview with instructor 3). From the social part, it is observed that the population involved has lived and lives emotional and family situations of great difficulty. This influences the capacity for trust, interaction and cohesion with the group. The people who participated in the project still live in environments of social conflict, it is permanently heard that their friends or relatives were killed, that they themselves were attacked in their physical integrity, that their families reject them or do not provide support, among others.

In relation to the above, the data obtained from the survey allow us to observe that 81.69% of the sample has witnessed or any of their relatives have been victims of violence, while 78.87% have been exposed to Violence at the individual level. In this sense, one of the instructors exposes a story that he remarked in his memory: "(...) she was killed by the husband in front of them and they took her out, who also raped her, that story seemed very hard to me" (Interview to instructor 3).

In short, it is necessary to generate a strengthening of "transversal or soft competencies" that contribute to the readjustment of the population to formal or institutional social dynamics, this by the hand of individual and group emotional accompaniment, as well as the systematic monitoring of processes of each apprentice. Thus, it is necessary that the institutional process recognize and articulate as part of the training and administrative process, the special conditions and needs of this population.

Economic, Institutional and Political Relevance

In economic terms, the population served mostly does not present a defined economic activity or an identified vocation, so the choice of the program to study has been made more from the taste for the title of the program, which they imagine could be or for the availability of quota. Likewise, they do not have a job or work, or considerable experience in this activity. In other words, this population does not bring work experience, which is why it is difficult to make a comprehensive analysis for the choice of the study program.

Taking into account that it is a special population, the search for employers or sponsors is made more difficult, since, although socially the need to offer opportunities to people in this situation is recognized as a mechanism to improve the quality of life and overcome problems of violence and conflict, in practice in general, the rest of the population, especially businessmen, do not commit themselves to the work of opening up these opportunities in their companies.

Regarding the issue, one of the SENA officials says:

"(...) At this moment we are looking for sponsorship, because it has been one of the most difficult things, if they had had the sponsorship from the beginning, there would not have been so many disappointments, because they would have had an income so that they could have sustained, but this is the time and we have not been able to get sponsorship, the management has been done, but since the program is so new, then it is a bit more complex, but I say that if we continue working on those rural hotels that are here in Cali and on what they know, the whole context of what the Seine is doing with them, which is a life opportunity that we are giving, is not just another apprentice, is a person who is helping to get out of an environment of war, of pain, then that would be very good" (Interview with civil servant 3).

Likewise, it is observed that the lack of work experience, coupled with a certain lack of knowledge of some basic skills or tools for social relations, such as vocabulary, personal presentation, manners, body layout, ways of responding, among others, do that the apprentices do not manage to successfully overcome the interviews for entry.

From an economic perspective, the resources of this type of population are scarce, which affects their material possibilities for the development of some activity that breaks the chain of social exclusion. They do not have a job or sufficient income to cover their basic needs, so that it does not cover food and transportation to attend training, less to cover other expenses such as uniforms, photocopies, etc.

Regarding this, the instructors declare:

"(...) They come and live in very hard situations, what did they do to go to study, as the schedule was often full-time, they worked at night many times, there was a lady who sold coffee and juices, since 3 in the morning until 5 or 6, he changed and went to study, on weekends he worked as a maid, anything, whatever comes out, they work on it, because they have their children and sometimes they have no way to support them, and Young boys who had their parents, found that they did not help them, they do not even know what they do, so they are complex situations" (Interview with instructor 1).

In a nutshell, the recognition, commitment and contribution of all the actors involved in the purpose of obtaining integral processes is required; which would guarantee the economic sustainability of apprentices and access to employability, as described in previous lines.



4. CONCLUSIONS

Based on the results and discussion generated, Table 5 describes the aspects that show the relevance of the programs in each of the components proposed for the analysis and according to the concepts issued by the actors involved in the training process.

	Instructors	Civil servant	Trainees
Educational- pedagogical Relevance	The relevance is evidenced in the redesign of methodological and pedagogical strategies by the instructors so that the contents are relevant to the trainees.	The training model is pertinent since it manages to address being, learn and do, integrating in its implementation the different services offered by SENA taking into account the particularity of the target population with the DEPORPAZ component.	Great acceptance of both technical, cross- sectional and DEPORPAZ contents as a contribution to their integral training.
Social Relevance, Social and Cultural Equity	Training as a means to overcome fears that prevent technical development from complex life stories, thanks to proper accompaniment.	Contribution to the creation of opportunities to enter the world of work.	Recognition of SENA as an opportunity for growth and development.
Economic, Institutional and Political Relevance	Difficulty in extended training days (morning and afternoon) due to the economic situation, as many needed to work for their livelihood.	Difficulty finding a learning contract, as a form of support for the trainees to remain in the training.	Despite the facilities in terms of access, staying in training is difficult due to the economic situation of most trainees

Table 5 Synthesis of relevance analysis according to established components

According to the analysis, it is established that the training programs are relevant to the components: educational-pedagogical and social relevance, social and cultural equity. Thus, in order to generate an impact on the component of economic, institutional and political relevance, it is vital to establish articulation strategies with entrepreneurs, as possible sponsors or contractors of these apprentices in moments prior to the development of the program. These strategies must be accompanied by awareness-raising days in which greater awareness and commitment is generated by the productive sector in the fight against poverty and peace building. In this way, it is minimally guaranteed that the trainees have the opportunity, at least, to make their practical stage. It should be noted that this point is part of a proposal presented to the institution as the second phase of the consolidation of the SENA Integral Intervention Model.

However, given that the Welfare area was indispensable for the process of apprenticeship training to be successful, it is considered necessary that with the previous experience obtained in this intervention a care model of this type of population be designed, in which, the specific needs

of this population are previously recognized and they are taken care of in a planned and articulated way to the formative process.

Finally, a key point is the design of extracurricular and didactic activities that allow trainees to have spaces to release tension, but at the same time have practical elements of motivation and encouragement to continue their process. In this type of population, it is observed that the fundamental result is aimed at provoking and strengthening their leadership and a sense of belonging to the institution, the group and its process, as a mechanism to generate a commitment to obtain satisfactory results both at the level Academic and work level.

In terms of the characterization and behavior analysis, we must clarify that the excombatants are not part of the statistical tests, since the observations lack statistical power, additionally, the results presented here are descriptive and do not assess causality or inference. It was found that individuals recognize their abilities to undertake, but not their abilities to lead, which does not differ significantly between victims and vulnerable population.

Regarding their cooperative attitudes, a bias towards the ex-combatants becomes quantitatively visible, taking as a reference the means of contributions to the group account depending on each type of population, the sample affirms that it wants to cooperate, on average, with someone from a vulnerable population by 75 % of its initial endowment (15,000), with a victim this percentage is 67% and with a former combatant it is 51%. However, the present investigation cannot account for the possible effect on individuals the transition through the MSII intervention model.

According to various interviews with instructors and officials, it is possible to consider that the target population is in a situation of distance from training processes, interaction with the institutions and society itself, which is why the apprentices have problems adapting to institutional dynamics, meet times and deadlines, understand the procedures established for the different procedures within SENA and even the way in which they relate, address others or recognize authority (Estivill, 2003; Labrunée & Gallo, 2005).

It is also important to note that, thanks to the documentary analysis of secondary information on the concept of relevance from different dimensions, factors and characteristics were consolidated into three components for the analysis of relevance:

Educational-Pedagogical

Social, Social and Cultural Equity

Economic, Institutional and Political

These components, as a whole, allowed recognizing the dynamics of feedback that must exist between educational institutions and the State, the productive sector, the social sectors and the value systems of a society (Malagón, 2006; 2009).

BIBLIOGRAPHIC REFERENCES

- Bauer, M., Blattman, C., Chytilová, J., Henrich, J., Miguel, E., & Mitts, T. (2016). Can war foster cooperation? The Journal of Economic Perspectives, 30(3), 249-274.
- Bogliacino, F., Grimalda, G., Ortoleva, P., & Ring, P. (2017). Exposure to and recall of violence reduce short-term memory and cognitive control. Proceedings of the National Academy of Sciences, 114(32), 8505-8510.
- Cárdenas, J. C. (2004). Regulaciones y normas en lo público y lo colectivo: exploraciones desde el laboratorio económico. *Documentos CEDE*.
- Craig, M. A., & Richeson, J. A. (2016). Stigma-based solidarity: Understanding the psychological foundations of conflict and coalition among members of different stigmatized groups. Current Directions in Psychological Science, 25(1), 21-27.
- Dias, J. (2008). Calidad, Pertinencia y Responsabilidad Social de la Universidad Latinoamericana y Caribeña. En Tendencias de la Educación Superior en América Latina y el Caribe. doi: https://doi.org/10.1016/j.jpowsour.2007.06.235
- Díaz, J. R., & González, R. R. (2001). Influencia de la práctica de deporte para la adquisición de habilidades sociales en los adolescentes. *Aula abierta*, (78), 29-46. Recuperado de https://dialnet.unirioja.es/servlet/articulo?codigo=209146
- Estivill, J. (2003). Concepts and strategies for combating social exclusion: An overview. Strategies and Tools against Social Exclusion and Poverty Programme.
- García, F. (2002). Currículum y pertinencia. Docencia Universitaria, 3(2), 107-123.
- García, L. M., Gutiérrez, D., González, S. y Valero, A. (2012). Cambios en la empatía, la asertividad y las relaciones sociales por la aplicación del modelo de instrucción educación deportiva. Revista de Psicología del Deporte, 21(2),321-330. Recuperado de: https://www.redalyc.org/articulo.oa?id=2351/235126897012

- Gibbons, M. (1998). Pertinencia de la educación superior en el siglo XXI. Education, Human Development Network, World Bank.
- Gilligan, M. J., Mvukiyehe, E. N., & Samii, C. (2013). Reintegrating rebels into civilian life: Quasi-experimental evidence from Burundi. Journal of Conflict Resolution, 57(4), 598-626.
- Harris, I., & Mische, P. M. (2004). Environmental Peacemaking, Peacekeeping, and Peacebuilding: Integrating Education for Ecological Balance and a Sustainable Peace. Educating for a culture of social and ecological peace, 169-182.
- Hartman, A., & Morse, B. (2016). Violence, Empathy, and Altruism: Evidence from the Ivoiran Refugee Crisis in Liberia. Browser Download This Paper.
- Higuera, L. (2018). Pertinencia de la cátedra para la paz en instituciones de educación superior. (Tesis de Especialización). Universidad Militar Nueva Granada. Bogotá.
- Kvale, S. (2011). Las entrevistas en investigación cualitativa. Ediciones Morata.
- Labrunée, M. E., & Gallo, M. E. (2005). Vulnerabilidad social: el camino hacia la exclusión.
- Ley 1064 de 2006: Por la cual se dictan normas para el apoyo y fortalecimiento de la educación para el trabajo y el desarrollo humano establecida como educación no formal en la Ley General de Educación. Cong. (26 de julio de 2006)
- Malagón Plata, L. A. (2006). La pertinencia en la educación superior: elementos para su comprensión Consideraciones generales. Revista de la Educación Superior.
- Malagón Plata, L. A. (2007). Currículo y pertinencia en la Educación Superior. Bogotá, Colombia: Cooperativa Editorial Magisterio.
- Malagón Plata, L. (2009). La vinculación Universidad-Sociedad desde una perspectiva 79-93. social. Educación y Educadores, 9(2), Recuperado de: https://educacionyeducadores.unisabana.edu.co/index.php/eye/article/view/664
- Martuscelli, J. & Martínez, C. (2002). Problemas de la Pertinencia de la Educación Superior en el Mercado Laboral. Memoria del Tercer Congreso Nacional y Segundo Internacional Retos y Experiencias de la Universidad, 6-9 de noviembre, Toluca, México: Universidad Autónoma del Estado de México.



- Mendoza Guzmán, Y. M. (2018). Evaluación de la pertinencia social del currículo del programa de inclusión educativa para adultos de la Institución Educativa Integrada La Candelaria (tesis de maestría). Universidad Externado, Bogotá.
- Mironova, V., & Whitt, S. (2016). Social Norms after Conflict Exposure and Victimization by Violence: Experimental Evidence from Kosovo. British Journal of Political Science, 1-17.
- Moscoso, D., Pérez, A., Muñoz, V., González, M., y Rodríguez, L. (2013). El deporte de la libertad. ANDULI, Revista Andaluza de Ciencias Sociales, (11), 55-69.
- Observatorio de Procesos de Desarme, Desmovilización y Reintegración. (2009). Las Universidades y la reintegración a la vida civil en Colombia. Universidad Nacional, Facultad de Ciencias Económicas. Recuperado de: https://repositorio.unal.edu.co/bitstream/handle/unal
- Ostrom, E. (1998). A Behavioral Approach to the Rational Choice Theory of Collective Action: Presidential Address, American Political Science Association, 1997. *American Political Science Review*. DOI: https://doi.org/10.2307/2585925
- Peña, A. Q. (2006). Metodología de investigación científica cualitativa. Psicología: Tópicos de actualidad, 47-84.
- Ramírez, A. A. (2010). La evaluación como herramienta para mejorar los procesos educativos de poblaciones socialmente vulnerables. Revista Iberoamericana de Educación, 53(5). Recuperado de: https://rieoei.org/historico/deloslectores/3778Ramirez.pdf
- Tajfel, H., y Turner, J. (1979). An Integrative Theory of Intergroup Conflict. The Social Psychology of Intergroup Relations. https://doi.org/10.1016/S0065-2601(05)37005-5
- Tajfel, H., y Turner, J. C. (1986). The Social Identity Theory of Intergroup Behavior. En Psychology of Intergroup Relations. doi: https://doi.org/10.1111/j.1751-9004.2007.00066.x
- Terigi, F. (2009). "El fracaso escolar desde la perspectiva psicoeducativa" en Revista Iberoamericana de Educación, no. 50, Madrid, OEI. doi: https://doi.org/10.35362/rie500659
- Tunnermann, C. (2000). Pertinencia social y principios básicos para orientar el diseño de políticas de educación superior. Educación Superior y Sociedad.

Revista Innova Educación Vol. 2. No. 1 (2020) pp. 91-113

- UNESCO. (1998). La Educación superior en el siglo XXI: Visión y acción. Conferencia Mundial sobre la Educación Superior: la educación superior en el siglo XXI visión y acción.
- UNESCO, L. (2008). Reflexiones en torno a la evaluación de la calidad educativa en América Latina y el Caribe.
- Santos, M. (1998). Evaluar es comprender. Buenos Aires: Editorial Magisterio.
- SENA, (s.f.). Misión y Visión SENA. Recuperado de http://www.sena.edu.co/esco/sena/Paginas/misionVision.aspx
- Selten, R. (1965). Die Strategiemethode zur Erforschung des eingeschränkt rationalen Verhaltens im Rahmen eines Oligopolexperimentes. Seminar für Mathemat. Wirtschaftsforschung u. Ökonometrie.
- Sutz, J. (1997). La universidad latinoamericana y su pertinencia: elementos para repensar el problema, en *Revista Quantum/CCEEA*, 9.
- Vollhardt, J. R. (2012). Collective victimization. Oxford handbook of intergroup conflict, 136-157.
- Voors, M., Nillesen, E. E., Verwimp, P., Bulte, E. H., Lensink, R., & Van Soest, D. (2010). Does conflict affect preferences? Results from field experiments in Burundi.

Conflicto de intereses / Competing interests:

Los autores declaran que no incurre en conflictos de intereses.

Rol de los autores / Authors Roles:

Gustavo Rincón. conceptualización, curación de datos, análisis formal, adquisición de fondos, investigación, metodología, administración del proyecto, recursos, software, supervisión, validación, visualización, escritura - preparación del borrador original, escritura - revisar & amp; edición.

Nathaly Jiménez: conceptualización, investigación, metodología, administración del proyecto, recursos, software, supervisión, validación, visualización, escritura - preparación del borrador original, escritura - revisar & amp; edición.

Michelle Castrillón: conceptualización, curación de datos, supervisión, validación, visualización, escritura - preparación del borrador original, escritura - revisar & amp; edición.

Fuentes de financiamiento / Funding:

Los autores declaran que no recibió un fondo específico para esta investigación.

Aspectos éticos / legales; Ethics / legals:

Los autores declaran no haber incurrido en aspectos antiéticos, ni haber omitido aspectos legales en la realización de la investigación.

