

IJL International Journal
of Innovation

Received on October 30, 2017 / Approved on December 13, 2017

Responsible Editor: Leonel Cezar Rodrigues, Ph.D.

Evaluation Process: Double Blind Review

E-ISSN: 2318-9975



doi>

<https://doi.org/10.5585/iji.v6i1.248>

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ELATIONSHIP OF INNOVATIVE SELF-PERCEPTION WITH TRAINING, HIRING AND PROFITS OF MICRO-ENTREPRENEURS

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ABSTRACT

Entrepreneurship has become a fundamental theme in Latin America. In recent years, public and private institutions have invested in training entrepreneurs in order to contribute to economic growth, job creation and reduction of poverty. In the presented research, the self-appraisal as innovators, micro-entrepreneurs who have attended training during the last five years, and micro-entrepreneurs without training is compared. In addition, I study whether the micro-entrepreneurs that self-perceive themselves as innovators are more prone to hiring workers and obtaining higher profits. The methodology used is hypothesis testing based with Chi-squared and descriptive statistics. The results showed that there is a greater proportion of trained micro-entrepreneurs that call themselves innovators and that this relationship is more relevant in some training topics. Moreover, innovative self-perception was linked to a greater intention of hiring and profits. The evidence obtained is considered relevant, since it allows for orientation of training activities in Latin American countries and for improvement of the selection of topics and methodologies to promote their effectiveness.

Keywords: Microentrepreneurship; Entrepreneurship; Micro-entrepreneurs; Self-Perception; Training; Hiring; Profits

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ELAÇÃO DE AUTO-PERCEPÇÃO INOVADORA COM TREINAMENTO, RECRUTAMENTO E UTILIDADES, DE MICRO-EMPREENDEDORES

RESUMO

O empreendedorismo tornou-se um tema fundamental na América Latina. Nos últimos anos, as instituições públicas e privadas investiram na capacitação de empreendedores para contribuir com o crescimento econômico, desenvolver o trabalho e reduzir a pobreza. Na pesquisa apresentada, a autopercepção, como inovadores, de microempreendedores treinados nos últimos cinco anos, é comparada com a autopercepção de microempresários sem treinamento, e também é estudado se os microempresários que se auto-percebem como inovadores são mais propensos a contratar pessoal e obter maiores lucros. A metodologia utilizada é teste de hipóteses com estatística Chi2 e estatística descritiva. Os resultados mostram que os microempresários que participam do treinamento se percebem como inovadores em maior proporção, Além disso, essa autopercepção inovadora está ligada a uma maior intenção de contratação e lucros na empresa. A evidência obtida é considerada relevante, pois permite orientar as atividades de treinamento nos países da América Latina e melhorar a seleção de tópicos e metodologias para promover sua eficácia.

Palavras-chave: Microempreendimento; Empreendedorismo; Microempreendedores; Autopercepção; Treinamento; Contratação; Lucros Das Empresas.

Cite it like this:

Barrera, G. (2018). Relationship of Innovative Self-Perception with Training, Hiring and Profits, of Micro-Entrepreneurs. *International Journal of Innovation*, 6(1), 1-15. <http://dx.doi.org/10.5585/iji.v6i1.248>

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ELACIÓN DE AUTO-PERCEPCIÓN INNOVADORA CON CAPACITACIÓN, CONTRACIÓN DE PERSONAS Y UTILIDADES, DE MICRO-EMPREENDEDORES

RESUMEN

El emprendimiento se ha transformado en tema fundamental en Latinoamérica. En los últimos años, instituciones públicas y privadas han invertido en capacitación de emprendedores, buscando contribuir con ello, al crecimiento económico, creación de empleo y reducción de la pobreza. En la siguiente investigación, se compara la auto-percepción como innovadores, de micro-emprendedores que han participado en capacitación durante los últimos cinco años, con micro-emprendedores sin capacitación, y adicionalmente, se estudia si micro-emprendedores que se perciben a sí mismos como innovadores son más propensos a la contratación de trabajadores y a obtener mayores utilidades. La metodología utilizada es prueba de hipótesis a través de estadístico Chi² y estadística descriptiva. Los resultados muestran que los micro-emprendedores capacitados se consideran innovadores en mayor proporción y que esta relación es mayor en algunos tópicos de capacitación, en forma complementaria, la autopercepción innovadora se relaciona con mayor intención de contratación y utilidades. La evidencia obtenida es considerada relevante, pues permite orientar actividades de capacitación in Latinoamérica, a través de la selección de tópicos y metodologías que promuevan su efectividad.

Palabras claves: Microemprendimiento; Emprendimiento; Micro-Emprendedores; Auto-Percepción; Capacitación; Contratación; Utilidades Empresariales.

INTRODUCTION

Since the twentieth century, various publications have recognized the relevance of entrepreneurship and in this area, Schumpeter (1934) has been a precursor. At the beginning of the 20th century he recognized that entrepreneurship is an activity that encourages the creation of work and contributes to economic growth. Schumpeter's perspective proposes that entrepreneurs create something new from an initial situation to generate new conditions, i.e., they have the capacity to innovate (Gilbert, McDougall & Audretsch, 2006).

Entrepreneurship has become a fundamental theme in recent years in Chile and Latin America. In this region, public and private organizations have sought to strengthen the motivation, attitude and results of ventures through the development of various programs. Training activities have often been included in these programs, which seek to strengthen entrepreneurial attitudes and motivations, transfer knowledge for business management and improve the results of entrepreneurs.

In a complementary way, in the field of entrepreneurs' psychological conditions, it has been recognized that self-perception — defined as the self-appraisal of the entrepreneur with respect to their individual characteristics and abilities — has an impact on their motivations, attitudes and behaviors (Gielnik et al., 2015). In this field, the concept of self-efficacy, understood as the self-perception of individual capacities with an impact on effective performance, has been widely analyzed in small- and medium-sized companies from different countries. In this regard, the relationship of self-efficacy with motivations and intention to develop ventures has been studied (Piperopoulos & Dimov, 2015). Moreover, differences have been recognized in motivation and intention to develop businesses with respect to entrepreneurs' demographic conditions, such as their gender (Mueller & Daton, 2013), age and level of education (Mauer, Neergaard, & Linstad, 2017).

Although research has recognized the benefits of training and the incidence of self-perception in motivation, attitude and persistence, the relationship between these two aspects in Latin American micro-entrepreneurs has not been studied. This knowledge is considered relevant, since it would allow to estimate the effects of efforts made by various institutions in strengthening the entrepreneurial attitude through training. Among the enterprises, the microenterprise category stands out in importance due to their high number and because they are associated with sectors of the population with lower incomes, therefore, it is considered that its strengthening would help to reduce unemployment and increase income.

Consequently, the objective of the proposed research was to analyze the self-concept differences among micro-entrepreneurs from Chile who have attended training during the last five years compared to those who have not attended. Specifically, I test whether the training participants perceive themselves as being more innovative and if these differences are specific to certain training topics. In a complementary way, differences were analyzed regarding the intention of hiring personnel and level of profits. Particularly, I evaluated whether micro-entrepreneurs present greater intention of hiring workers and generating higher profits. Recruitment was considered as an indicator of the development or growth perspective of an organization and profits were considered as an indicator of performance.

THEORETICAL REFERENCE FRAMEWORK

Training has been defined as the intervention of an educator to develop learning in topics related to entrepreneurship or skills to survive in the field of business (Valerio, Parton & Robb, 2014), as an organized and systematic process applied in the short term for the adoption of knowledge and attitudes (Chiavenato, 2000), or activities to transfer knowledge and skills demanded by the labor market (Mondy, 2010). In

a complementary way, Romero (2015) states that training includes the practice of activities. However, its main objective is to provide knowledge in areas related to the occupation of the person who participates in the training. Moreover, I emphasize that the development of a training program includes diagnostic, planning, implementation and evaluation phases.

Authors have recognized the favorable incidence of training on entrepreneurship. For example, it is estimated that education and training programs for entrepreneurs create openness and confidence for entrepreneurship (Elmuti, Khoury & Omran, 2012), that training has a favorable impact on the entrepreneurial attitude (Sánchez, 2013) and strengthens management capacities for its development (Putta, 2014; Njoroge & Gathungu, 2013). In the area of microenterprises, benefits have been recognized regarding increasing income and achieving the objectives of the organization (Kessy and Temu, 2010, Dumas, 2001). In Latin America, Jara (2002) found evidence regarding the incidence of training on increased productivity in Chile. In addition, Correa and Dini (2017) acknowledge that training has been incorporated as a main activity in Chilean municipalities to encourage economic development.

In a complementary way, the study of entrepreneurs' psychological conditions, which includes aspects such as personal motivations (Jayawarna, Rouse & Kitching, 2013) and lifestyle (Markantoni, Koster & Strijker, 2014), has shown the relevance of the subject of self-concept or self-perception, defined as the opinion or the mental image that micropreneurs have of themselves and beliefs about who they are as people (Hamachek, 1987). The study of self-perception has suggested that this construct affects motivation (Calder & Staw, 1975), favorable attitudes (Claiborne & Sirgy, 2015), persistence (Schwarzer, 2014), and the intention to start new businesses (Minniti and Nardone, 2007). Regarding innovative self-perception, studies focus on the field of consumption. Sirgy (1982) argues that the innovative self-appraisal of consumers has an impact on the choice of their products. In Latin America self-concept has been linked with motivation and creativity and it has been estimated that these concepts are relevant

factors for the development of ventures (Latorre and Vanessa, 2011). Likewise, differences in emotional self-concept have been recognized between entrepreneurs and non-entrepreneurs (Giménez Lozano et al., 2016).

The study of self-perception in entrepreneurship has been mainly associated with self-efficacy, defined as the self-perception of an individual with respect to a field of performance (Bandura, 1977, 1986). A large number of investigations have been developed that recognize the benefits of self-efficacy on entrepreneurship. For example, they have suggested that self-efficacy affects the intention to develop a business (Boyd & Vozikis, 1994; Zhao, Seibert & Hills, 2005), the recognition of opportunities to develop a business (Krueger & Dickson, 1994) and that it favors the inventiveness and creation of new companies (Markman, Balkin & Baron, 2002).

Research in Ibero-America regarding self-efficacy has been mainly carried out in Spain (Carrizo et al., 2011; Moriano et al., 2012; Mortan et al., 2014; De la Rosa, Rodríguez & Rodríguez, 2014). In Latin America self-efficacy studies have been published mostly during the last decade. In this context, Vargas (2007) shows the influence of self-efficacy on entrepreneurial intention in Business Science students in Peru. Furthermore, Ferrer (2009) developed a predictive model of self-efficacy and analyzes psychological foundations of self-efficacy in young Mexicans. In addition, Mas and Desiderio (2009) recognize the incidence of self-esteem and self-efficacy on workers' performance and job satisfaction in Chile. Mayoral and Salvador (2014) analyze the relationship between entrepreneurial self-efficacy, emotional intelligence and life satisfaction in technological ventures and Durán-Aponte and Arias-Gómez (2015) study incidence of self-efficacy on entrepreneurial intention in university students in Colombia.

The relationship of training and self-efficacy has been studied by Piperopoulos and Dimov (2015) in Great Britain. These authors relate courses for entrepreneurship with a theoretical and practical approach with self-efficacy and intention to undertake ventures. Their results show that in courses of entrepreneurship with a practical approach, the magnitude of self-efficacy and intention to

develop businesses is greater. In addition to these results, Wilson, Kickul and Marlino (2007) evidence that the effect of teaching in Masters in Business Administration (MBA) on self-efficacy is greater in female students.

Regarding training, in Latin America previous research has mainly studied social and economic training benefits (Albuquerque, 1997, 2004; Abdala, 2001; Chacaltana & Sulmont, 2004) and formulated proposals to strengthen programs aimed at entrepreneurs (Castillo, 1999; Osorio & Pereira, 2011), more than to analyze the internal processes and personal behaviors associated with the participation of entrepreneurs in training. Consequently, it is estimated that there is a knowledge gap in Latin America in the study of the relationship of self-perception with training assistance, as well as with behaviors such as hiring personnel and specific results, such as profits obtained by the organization. This gap is considered especially significant in micro-ventures due to the relevance of these companies in job creation and economic activity in countries in the region, and the efforts of public and private organizations to support the training of micro-entrepreneurs.

HYPOTHESIS

Considering the previous evidence, which suggests a positive relationship between training assistance and an entrepreneurial attitude (Sánchez, 2013), and the positive relationship of formal education with self-efficacy (Wilson, Kickul and Marlino, 2007), the following hypothesis is proposed:

H1: Participation in training is positively related to the innovative self-perception of micro-entrepreneurs.

Likewise, in coherence with the results of Piperopoulos and Dimov (2015), who consider that the practical approach to training is related to greater entrepreneurs' self-efficacy, the following hypothesis is presented:

H2: Innovative self-perception presents a higher prevalence in entrepreneurs trained in

topics with practical focus, which impact with concrete solutions in micro-enterprises.

Ultimately, it has been suggested that positive self-perception is related to greater motivation (Claiborne & Sirgy, 2015), persistence (Schwarzer, 2014) and propensity to develop new businesses (Minniti and Nardone, 2007). Consequently, it is estimated that micro-entrepreneurs who consider themselves as innovators would tend to hire personnel and obtain higher profits because of their persistence, motivation and business attitude. The following hypotheses are included:

H3: Innovative self-perception is associated with greater intention to hire workers in micro-enterprises.

H4: The innovative self-perception of micro-entrepreneurs is linked to higher profits in their companies.

METHODS

The Fourth Micro-entrepreneurship Survey of the Ministry of Economy, Development and Tourism of Chile (2016) was studied and 5836 validly issued answers were selected from micro-entrepreneurships that would maintain their business activities. Organizations with nine or less workers were estimated as micro-enterprises (Ministry of Economy of Chile, 2016).

Analysis was carried out with hypothesis tests and Chi-squared statistics to estimate differences in innovative self-perception according to participation in training and the intention to recruit personnel. In a complementary way, descriptive statistical analysis was used to recognize profit differences in micro-entrepreneurs who define themselves as innovators. The study variables to evaluate innovative self-perception, participation in training, the most relevant training topic, the intention to hire and the profit level are presented in Table 1.

Table 1: Entrepreneur variables related to innovative self-perception

Study variable	Survey question	Answer scale
Innovative self-perception	Do you consider yourself to be an innovator?	Dichotomous: yes, no
Participation in training	In the last 5 years, have you received any type of training for the economic activity that you do?	Dichotomous: yes, no
Willingness to hire workers	Do you plan on hiring workers in the next 12 months?	Dichotomous: yes, no
Profit level of the company	At what level are the average monthly earnings of your business?	Ordinal: 12 levels of utilities, from 0 to 200 000 000.
The most relevant training theme	What is the most important area in which you received training for the development of your business?	Nominal: selection of a topic considered to be more relevant.

Source: Fourth Survey of Entrepreneurship Ministry of Economy of Chile (2016)

The training topics proposed as the most relevant, which are related to innovative self-perception, are presented in Table 2.

Table 2: Training topics declared as most relevant by micro-entrepreneurs

Training topics	Identification code
Management and administration	1
Finance / Accounting	2
Innovation	3
Specialization in productive area (productive improvement)	4
Languages	5
Sales / Marketing / Customer service	6
Technologies / Computing	7
Safety / Risk Prevention / Industrial Hygiene	8
Other	99

Source: Fourth Survey of Entrepreneurship Ministry of Economy of Chile (2016).

RESULTS

Regarding the proportion of micro-entrepreneurs that are considered to be innovative, in groups of entrepreneurs that participate or not in training, Table 3 shows that there are differences in proportion. Null hypothesis with 99% confidence was rejected

using the Chi-squared statistic, and in specific terms, it is evident that training participants showed a higher proportion of innovative self-perception. It is appreciated that the percentage of micro-entrepreneurs who define themselves as innovators is greater in the group of training participants in the total sample, as well as in the male and female gender groups.

Table 3: Relationship training and innovative self-perception

	Training	Self-concept			Pr Chi ²	Percentage Self-perception	Difference Percentage
		No	Yes	Total			
Total group	No	844	3667	4511	0.000***	81.3%	7.3%
	Yes	151	1174	1325		88.6%	
Women	No	273	1259	1532	0.000***	82.2%	9.0%
	Yes	55	572	627		91.2%	
Men	No	571	2408	2979	0.001***	80.8%	5.4%
	Yes	96	602	698		86.2%	
	Total	995	4841	5836		83.0%	

Source: Own elaboration.

The percentage difference analysis of innovative self-concept among the training participants (differentiating the total group, women and men) evidence that the difference is greater in the group of female micro-entrepreneurs (9.0%). Therefore, it is possible to argue that participation in training could have a greater effect on the self-perception of the female gender.

The results of self-perception differences by training topics that are declared as being more

relevant, presented in Table 4, shows that for most topics no differences are recognized. Only the micro-entrepreneurs that declare the participation of training in innovation and productive specialization as being most relevant demonstrate a greater proportion of innovative self-perception. The Chi-squared test rejected the hypothesis of equality of proportions with other training subjects (90% confidence).

Table 4: Relationship topic of training and self-perception

	Most important topic	Self-perception			Pr Chi ²
		No	Yes	Total	
Management and administration	No	132	994	1126	0.373
	Yes	19	180	199	
Finance / Accounting	No	141	1104	1245	0.749
	Yes	10	70	80	
Innovation	No	149	1120	1269	0.060*
	Yes	2	54	56	
Specialization in productive area (productive improvement)	No	48	457	505	0.089*
	Yes	103	717	820	
Languages	No	151	1167	1135	0.341
	Yes	0	7	7	
Sales / Marketing / Customer service	No	145	1097	1242	0.217
	Yes	6	77	83	
Technologies / Computing	No	148	1138	1286	0.460
	Yes	3	6	38	
Safety / Risk Prevention / Industrial Hygiene	No	145	1150	1295	0.134
	Yes	6	24	30	

Source: Own elaboration.

I concluded that the results do not show differences regarding innovative self-concept in most of the study subjects considered as being more relevant. Moreover, only the thematic innovation and productive specialization generate differences of self-appraisal in the micro-entrepreneurs respect of other topics. Regarding the comparison of the intention to hire personnel from companies led by micro-entrepreneurs with and without innovative self-

concept, the results suggest that, firstly, microentrepreneurs who claim to be innovators have a greater intention to hire workers (Chi-squared test rejects the hypothesis of equality of proportions with 99% confidence). The results presented in Table 5 indicate that in the groups with the intention of hiring personnel the percentages of people with innovative self-concept are higher in the total group as well as in the groups of women and men.

Table 5: Intention of hiring by self-perception

	Intention to hire workers	Self-perception			Pr Chi ²	Percentage self-perception	Percentage difference
		No	Yes	Total			
Total group	No	889	3780	4669	0.000***	81.0%	9.7%
	Yes	91	881	972		90.6%	
Women	No	308	1562	1870	0.000***	83.5%	10.6%
	Yes	14	226	240		94.2%	
Men	No	581	2218	2799	0.000***	79.2%	10.2%
	Yes	77	655	732		89.5%	
Total		980	4661	5641		82.6%	

Source: Own elaboration.

The analysis of percentage differences regarding innovative self-concept among entrepreneurs with and without intent to hire shows a greater difference in women. Therefore, it is estimated that women with innovative self-perception could have more intention to hire compared to men. In relation to differences in the

level of company earnings with and without innovative self-concept, Table 6 illustrates a greater arithmetic mean in the segment of profits in micro-entrepreneurs that are considered as innovative. Moreover, the difference of the mean in groups with innovative self-concept is greater in men (0.70) compared to women (0.31).

Table 6: Average earnings in micro-enterprises by innovative self-perception

	Self-perception	Company earnings			
		Arithmetic mean	Standard deviation	Difference in means	Coefficient of variation
Total group	No	2.88	2.89	0.34	1.00
	Yes	3.22	2.88		0.89
Women	No	2.20	2.42	0.31	1.10
	Yes	2.51	2.45		0.98
Men	No	2.88	2.60	0.70	0.90
	Yes	3.58	3.06		0.85

Source: own elaboration.

Likewise, a profit dispersion analysis was carried out through the calculation of coefficient

of variation in micro-entrepreneurs with and without innovative self-concept. When

comparing the total group and the group of women and men, there is a greater dispersion of earnings in the group of women without innovative self-concept (Coefficient of variation=0.85), as well as a greater difference in coefficient of variation among women with and without an innovative self-concept (0.98-1.10=-0.12). On the other hand, men who perceive themselves as innovators demonstrate less profit dispersion (Coefficient of variation=0.85). Moreover, a smaller difference in coefficient of

variation was presented between men with and without an innovative self-concept (0.85 – 0.90=-0.05). Additionally, the frequency analysis of profit levels in micro-enterprises shows a higher percentage of people with innovative self-concept in the higher benefits section in the total sample and in the group of male and female micro-entrepreneurs. Table 7 illustrates these percentages considering 467 validated answers of micro-entrepreneurs. The results are consistent with those obtained in Table 6.

Table 7: Percentage frequency of profit level by self-perception

	Earnings	Self-perception				Total
		No	% No	Yes	% Yes	
Total group	0-1 125 000	49	12.5%	343	87.5%	392
	1 125 001 – 200 000 000	6	9.1%	60	90.9%	66
	Total	56	12.0%	411	88.0%	467

Source: Own elaboration.

CONCLUSIONS

The analyzes carried out illustrate that there are differences in innovative self-perception among entrepreneurs who have and have not attended training during the last 5 years. Specifically, it is recognized that trained micro-entrepreneurs perceive themselves as innovators more frequently, thus, Hypothesis 1 is validated.

Also, it is estimated that trained micro-entrepreneurs who recognize the thematic innovation and productive specialization as being the most relevant presents a higher prevalence of innovative self-perception. These topics present practical orientation and impact micro-enterprises with concrete solutions, therefore, this validates Hypothesis 2.

Additionally, it is recognized that the innovative self-concept is related to a greater intention to hire workers and this trend is greater in women. Consequently, H3 is validated. Finally, greater profits are seen in the group of micro-entrepreneurs that self-perceive themselves as innovators and this difference is greater in men, thus, hypothesis 4 is validated.

DISCUSSION

The results obtained are consistent with previous research, particularly with research by Bandura (1977, 1986), which states that self-perception, the perception of the environment, and the behavior of people are related to and affect each other. Although it is not possible to determine teleological type causality, since this condition requires longitudinal or experimental research designs to compare groups or changes over time, the present study of a correlational and explanatory (partial) type evidences the link between these variables.

Consequently, it is estimated that a greater number of trained micro-entrepreneurs tend to increase the number of micro-entrepreneurs with innovative self-perception and with it the intention of hiring personnel (generation of employment) and obtaining greater profits. These links justify the current efforts of private and public organizations to support the training of entrepreneurs.

Additionally, the analysis indicates that innovation and productive specialization themes

(according to company scope) are more related to innovative self-perception. Therefore, it is estimated that training topics such as: innovation foundations, analysis of user experience, thinking of design and technological specialization to support the company's operations strengthen the self-perception of micro-entrepreneurs, and with it the hiring of workers and profits of micro-enterprises in Chile and emerging Latin American countries with similar conditions.

It is important to incorporate the information obtained in the strengthening of programs to support micro-entrepreneurship, as these organizations contribute significantly to employment in Chile and other Latin American countries. As a proposal to strengthen the innovative self-concept through training, it is considered to increase the amount of training regarding innovation and productive specialization and its depth, as well as implementing incentives for the incorporation, assistance and completion of training programs, in order to improve their effectiveness. In specific terms:

- Extend and deepen the dictation of courses with innovation themes, such as Design Thinking methods for analyzing user experience and creativity.
- Expand and deepen the execution of courses aimed at productive specialization, such as the adoption of technology for production or process management.
- Execute coaching activities for micro-entrepreneurs in order to strengthen their innovative self-concept, their entrepreneurial initiative and their persistence of activities.
- Implement mentoring programs, which are aimed at micro-entrepreneurs without innovative self-concept, to support the development of business or marketing plans that strengthen their sales.
- Encourage participation in training through subsidies focused on profiles of relevant micro-entrepreneurs.
- Encourage training assistance through the coverage of basic expenses, such as transportation and food expenses.
- Develop subsidy programs for hiring aimed at entrepreneurs without the prevalence of innovative self-perception. This condition can

be evaluated through an instrument applied to entrepreneurs.

- Increase the supervision of assistance and achievement of objectives in training programs.

For the application of these activities it is feasible to develop an evaluation survey of micro-entrepreneurs in which they are consulted about self-concept, their participation in training, and their current financial situation. The information obtained from this evaluation would allow to diagnose people with needs of coaching, training, mentoring and to propose more effective activities for their profile. It is estimated that the activities exposed would improve the effectiveness of support for micro-enterprises by differentiating actions based on the self-perception of program participants. Indeed, the recommendations could be considered in microenterprises of other Latin American countries with comparable characteristics, such as Argentina or Uruguay.

Strengthening the development of microenterprises in Latin America is considered relevant, since these organizations contribute significantly to the Gross Domestic Product of Latin American countries (Fundes, 2017). Moreover, these organizations create a high number of jobs, increase the income of citizens and reduce poverty (Alvarez, 2009). Finally, the recommendations are coherent with the arguments of Morales (2002), Ávalos and Murillo (2013), and the Labor Observatory of Central America and the Dominican Republic. (2008), who consider it necessary to evaluate training needs prior to the development of differentiated programs to improve their effectiveness.

LIMITATIONS

The results presented in this investigation do not explain which specific training activities affect self-perception, through the analysis of aspects such as role and profile of the trainer, training times and evaluative activities. Additionally, the evolution of groups in longitudinal form was not analyzed, so as to understand the training effect on entrepreneurs studied.

Future research could include qualitative measurement techniques, which allow to investigate processes of change in the trained entrepreneurs, to understand the influence of training on their self-perception and on entrepreneurial actions that affect the financial results of micro-enterprises, in addition to analyzing entrepreneurs that develop larger scale organizations, such as small and medium enterprises.

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