

**CONTRIBUTIONS OF COMMUNITY PSYCHOLOGY TO RURAL ADVISORY
SERVICES: AN ANALYSIS OF LATIN AMERICAN RURAL EXTENSIONISTS' POINT
OF VIEW**

Abstract

During the last decade, rural extension has received interest as being a key tool for rural development. Despite rural extension being affected by many psychosocial processes, psychology has made scarce contributions to it. An investigation was conducted with the aim of gaining knowledge of rural extensionists' expectations of psychology, as well as to contribute to shaping community psychologists' role in the context of rural extension. 652 extensionists from 12 Latin American countries were surveyed. The survey included closed socio-demographic questions as well as open ones addressing extension practice and psychologists' potential contributions. 90.6% of surveyed extensionists considered psychology could help them improve their practice. Most mentioned areas of contribution go in line with community psychology, including managing farmers groups, facilitating participatory processes and training extensionists; while others, such as the expectation of changing farmers' mindset and increasing the adoption of external technologies, go against its principles. Thus, in some cases, extensionists' expectations could help generate an interesting interaction between community psychology and rural extension, while in others, they need to be put up for discussion. In brief, community psychology has the potential to contribute to rural extension, but it needs to acknowledge extension practice as an interesting area for intervention.

Key words: Contributions; Rural extension; Rural advisory services; Community psychology; Latin America; Farmers

INTRODUCTION

Rural advisory services, also known as rural extension (Leeuwis, 2004), have recovered interest within the context of rural development policies both in Latin America (Aguirre, 2012; Alemany & Sevilla, 2007) as well as worldwide (Sulaiman, & Davis, 2012). This growing interest is evidenced by the increasing attention given to the topic by international institutions such as the Food and Agriculture Organization of the United Nations (FAO) (e.g. Acunzo, Pafumi, Torres & Tirol, 2014; Christoplos, 2010; Pérez & Clavijo, 2012) and, in the American continent, the Inter-American Institute for Cooperation on Agriculture (IICA) and the Inter-American Development Bank (IDB) (e.g. Ardila, 2010; Chavarría, 2013; Trigo, Mateo & Falconi, 2013). Additionally, the creation of the Global Forum for Rural Advisory Services (GFRAS) in 2010 is an important milestone, given that it is the first global network aimed at strengthening and providing advocacy for rural advisory services worldwide.

In this context, it is strange that, in recent years, psychology in general and community psychology in particular have made scarce contributions to rural extension (Landini, Benítez & Murtagh, 2010; Murtagh & Landini, 2011), perhaps due to the fact that psychology has traditionally focused on urban (not rural) scenarios (Landini, in press a; Leite & Dimenstein, 2013; Sánchez Quintanar, 2009) and that the psychosocial dimension of rural extension has not commonly been acknowledged by psychologists (Landini, Leeuwis, Long & Murtagh, 2014). During the 1970s, Latin American community psychology, unlike the American one (more related to health issues), gave particular attention to development processes (Montero, 1994). Nonetheless, during the following decades, the interest in the notion of 'development' itself declined within Latin American community psychology, social sciences and public policy (Landini, 2007). Now, given the recently renewed interest in rural extension as a key instrument for rural development (Abdu-Raheem & Worth, 2012; Omar, Bakar, Jais & Ibraik, 2011; Zwane,

2012), it is essential to both clarify the role community psychology can play in the context of rural extension work and, in this way, to contribute to strengthening these processes and their impact at a community level. Thus, in this paper, the results of an investigation aimed at describing and shaping the role of psychology in general and community psychology in particular will be featured. Concretely, this paper will present, analyze and discuss Latin American rural extensionists from 12 different countries' expectations regarding psychology.

Given the psychosocial nature of this journal, the notion of rural extension (or of rural advisory services) will be clarified. The roots of rural extension go back the nineteenth century, but it only became a practice on a national level in the United States during the first half of the twentieth century (Leeuwis, 2004). The American model was replicated in Latin America with the support of the United States around the middle of the previous century. Originally, rural extension meant 'extending' agricultural knowledge developed in the universities (mostly regarding the 'green revolution') to farmers in a hierarchical and authoritarian way, as Paulo Freire pointed out during the seventies (Freire, 1973). This is the reason why the notion of rural extension became controversial and thus many authors preferred to talk about rural advisory services (Leeuwis, 2004). During recent years, its meaning has changed. Nowadays, it refers to a participatory and horizontal process (Ortiz, 2009; Ortiz, Mejía et al., 2011; Trigo, Mateo & Falconi, 2013) of brokering among different institutions and social actors (Acunzo et al., 2014; Nederlof, Wennink, & Heemskerk, 2010; Ortiz, Rivera, Cifuentes & Morrás, 2011) and to the training, supporting and empowering of farmers and their organizations (Dirven, 2003; Pérez & Clavijo, 2012). Nonetheless, this new approach is far from being hegemonic in Latin America and worldwide (Landini, 2014), a phenomenon which implies that, nowadays, the concept is polysemic and used to refer to both the traditional meaning of rural extension as well as more contemporary ones, including multiple mixed and hybrid alternatives.

METHODOLOGY

In order to identify and describe Latin American rural extensionists' expectations of psychology, as well as to shape the role of psychologists in the context of rural extension, a qualitative and quantitative research was conducted. The investigation aimed at several objectives. In this paper, only the quantitative results of the extensionists' expectations of psychology are presented. A survey was conducted in 12 Latin American countries. It included three parts: socio-demographic closed questions; open questions about problems faced by rural extensionists during their practice; and queries regarding expectations of the field of psychology. This last part included four questions (originally written in Spanish and Portuguese):

1. Taking into account problems mentioned in previous questions, do you think psychology could help solve some of them? [Closed question with options YES/NO]
2. If you replied YES to the previous question:
 - 2.1. Which problems mentioned in previous questions could psychology help solve?
 - 2.2. What additional contributions could psychology make to extension work?
 - 2.3. If not mentioned in previous replies, in which ways do you think psychologists could make contributions to extension work? In which activities or concrete actions could they partake?

The survey was conducted between 2010 and 2014. In total, 652 extensionists from 12 different Latin American countries replied to the third part, including: Argentina, Bolivia, Brazil, Chile, Costa Rica, Cuba, Ecuador, El Salvador, Mexico, Paraguay, Peru and Uruguay. In order to gather the sample, rural extension institutions (mostly public) were contacted in the different countries mentioned above. The survey was sent and received in all cases via email, using a Microsoft Word form. Reply was voluntary. In the introduction to the survey, confidentiality of the identity of the respondents and of individual results was informed. Given a non-probabilistic, accidental sampling criteria was used, results cannot be considered representative of all extensionists

working in those countries. In Table 1 general characteristics of the country samples are informed. Differences with regards to sex, age and years of experience as an extensionist in the different samples were not looked for, but emerged as the result of the surveys answered. Quota sampling could not be applied given that no information about the distribution of such variables was available. Differences with regards to the sample size have to do with the support found in each country.

Table 1. General characteristics of the samples

Country	n =	Sex		Mean age (in years)	Experience as extensionists (in years)	Year of the surveys
		Female	Male			
Argentina	220	35%	65%	42,15	11,3	2010 & 2011
Bolivia	19	31,6%	68,4%	41,37	9,1	2010 to 2012
Brazil	52	40,4%	59,6%	45,85	18,1	2011 & 2012
Chile	41	53,7%	46,3%	40,12	10,7	2012
Costa Rica	32	12,5%	87,5%	53,69	24,9	2014
Cuba	31	58,1%	42%	46,00	14,6	2013
Ecuador	74	25,7%	74,3%	36,99	9,4	2010 & 2011
El Salvador	34	2,9%	97,1%	41,33	13,9	2010
México	60	26,7%	73,3%	41,12	9,6	2010 & 2012
Paraguay	26	26,9%	73,1%	34,38	10,1	2011
Peru	31	9,7%	90,3%	39,77	9,6	2011 & 2012
Uruguay	32	43,75%	56,25%	40,28	9,5	2012
Total	652	31,9%	68,1%	41,8	12,2	2010 to 2014

In order to analyze the data, two procedures were applied. Firstly, using the support of Atlas Ti software, inductive categories were constructed in order to organize similar contents or ideas that appeared in the open questions. During this part of the work, ambiguous fragments were included anyway in the categories. After having read all the replies several times and categorized all of them, a written definition was reached for each one, including criteria for including/excluding ambiguous fragments. After that, all fragments pertaining to each category were checked against the final content definition, consequently excluding fragments that did not fulfill the criteria. Categories with unclear boundaries were excluded from the analysis. Finally, two different areas of categorization were identified: with whom/what psychologists should work in the context of rural extension practices, and pertinent knowledge or specific areas to which psychologists could contribute.

Secondly, results from the qualitative phase were incorporated into SPSS software. Each category was treated as a nominal variable. Those mentioned at least one time in a survey were considered 'present' and those that were not, 'absent'. In the case of variables pertaining to the area 'with whom/what psychologists should work' the possibility of ambiguous fragments was acknowledged. When this happened, variables were considered 'missing value' with regards to the specific survey. Finally, using SPSS functionalities, the relationships between these variables and country, sex, age, years of experience as extensionist, level of education and university degree were analyzed. Level of education was valued as follows: no education = 0; primary school = 1, secondary school = 2, post-secondary (but not university) technical or vocational training = 3, university = 4, post-graduation courses = 5, specialization = 6, master = 7, PhD = 8. University degree was valued as a nominal variable categorized as follows: agricultural engineer, veterinary or engineer in animal husbandry, social sciences, and other. To analyze relationships between variables, non-parametric tests were used given normal distribution could not be

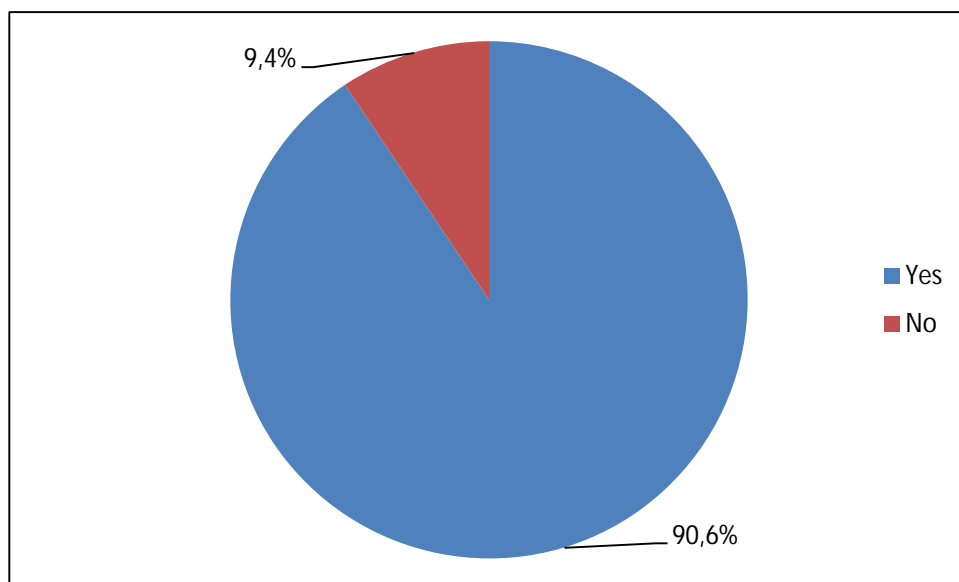
assumed (Kolmogorov-Smirnov: $p < .001$ for age, years of experience and level of education)

RESULTS

In order to avoid the overvaluation of bigger country samples, when replying to the question of whether or not psychology could contribute to rural extension and when describing such contributions, percentages will refer to the mean of the countries' means and not to the mean of the integrated sample containing all research participants. Additionally, when analyzing potential contributions (this is, categories developed with the support of Atlas Ti software), percentages will refer only to the extensionists affirming that psychology can contribute to their work. In what follows, when presenting results, these clarifications will not be referred to again or insistently, so as to avoid unnecessary repetitions.

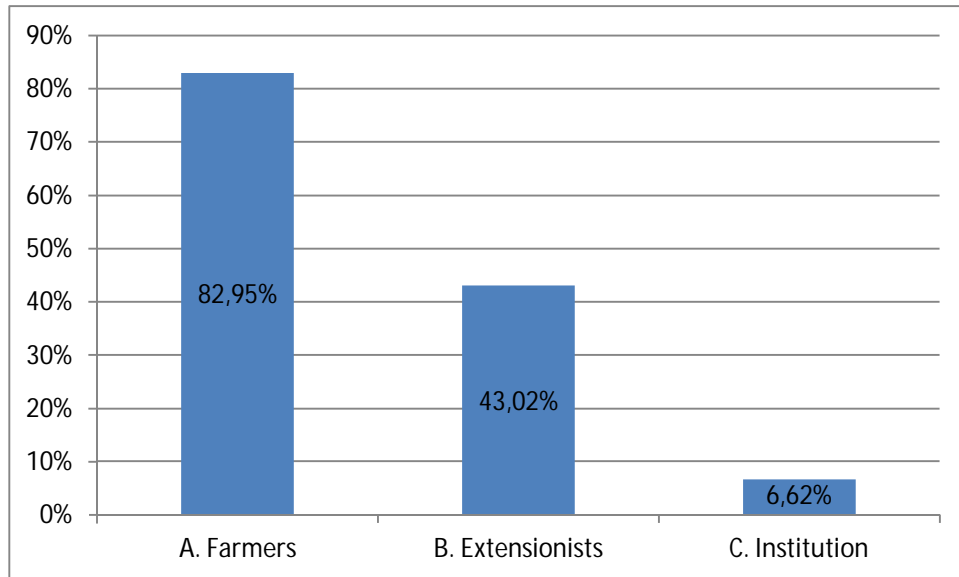
In Figure 1, the percentage of extensionists supporting the idea that psychology can contribute to rural extension is illustrated.

Figure 1. Can psychology contribute to solving rural extension problems?



In Figure 2, the percentage of extensionists supporting different beneficiaries of psychologists' contributions to rural extension is presented.

Figure 2. Beneficiaries of psychologists' contributions to rural extension



In Table 2, specific psychologists' contributions to rural extension are shown. Given that this is the result of categorizing open questions, the list is quite long. In order to choose the most relevant in quantitative terms, items mentioned by a mean of 25% of the extensionists or by at least by 35% of respondents in two countries are included in the list. At the same time, others also considered relevant in qualitative terms, due to their relevance when thinking about the role of psychologist, are included. In order to identify them, they are highlighted using the symbol (R) for 'relevant'.

Table 2. Specific contributions of psychologists to rural extension

Contents	Percentages
1. To train farmers and manage groups and participatory processes.	54,1%
2. Psychologists have the knowledge and training to manage groups and interpersonal relationships.	44,3%
3. To support adoption of technology and change of farmers' mindset.	32,4%
4. To train, to give advice or to provide tools for rural extensionists.	32,2%
5. To generate farmers' sense of ownership, motivation and dynamism with regards to development projects.	29,7%
6. To increase and strengthen farmers' self-esteem.	27,1%
7. To help understand farmers.	20,8%
8. To take part in interdisciplinary or extension work teams.	20,1%
9. To contribute in the areas of gender, youth and family.	18,9%
10. To give pedagogical and interpersonal communication support (R).	16,8%
11. To provide emotional or therapeutic support to farmers (R).	7,8%
12. To provide emotional or therapeutic support to rural extensionists (R).	3,9%

Finally, the relationships between rural extensionists' socio-demographic variables and psychosocial contributions to rural extension are shown in Table 3. Contributions are listed in the same order as they were presented. The first addresses whether or not psychology can contribute to rural extension (Figure 1), the following three refer to psychologists' beneficiaries in the context of extension work (Figure 2), and the rest are numbered as they were in Table 2. To relate nominal variables Chi-Square (χ^2) is used, which is replaced by the Contingency Coefficient (cc) when more than 20% of the cells had expected values of less than 5; and to relate nominal to ordinal or quantitative variables Mann Whitney U (MW) is calculated. When the variable, "whether or not psychology can contribute to rural extension work" is put in relationship with other variables then all the surveys are included in the analysis. However, when establishing statistical relationships between potential contributions and socio-demographic variables, only those extensionists who considered psychology could contribute are considered.

Table 3. Relationships between socio-demographic and psychologists' contributions

	Countries (χ^2 or cc)	Sex (χ^2)	Age (MW)	Experience (MW)	Education (MW)	Univ. degree (χ^2 or cc)
Can psychology contribute?	cc = .21**	2.22(1)	z = -1.85	z = -1.43	z = -2.67**	cc = .10
A	cc = .27**	.10(1)	z = -1.76	z = -2.00*	z = -.38	1.32(3)
B	94.2(11)**	.34(1)	z = -.61	z = -.49	z = -3.44**	4.15(3)
C	cc = .17	.35(1)	z = -1.95	z = -2.38*	z = -1.04	cc = .09
1	32.4(11)**	7.34(1)**	z = -2.32*	z = -1.68	z = -.16	6.23(3)
2	40.8(11)**	14.1(1)**	z = -1.80	z = -.72	z = -1.39	16,0(3)**
3	87.8(11)**	.09(1)	z = -2.43*	z = -2.19*	z = -2.12*	13.0(3)**
4	40.8(11)**	1.67(1)	z = -.88	z = -1.47	z = -1.24	1.11(3)
5	61.1(11)**	.69(1)	z = -3.48**	z = -3.20**	z = -.91	4.65(3)
6	51.9(11)**	.85(1)	z = -.33	z = -.23	z = -.41	1.74(3)
7	34.3(11)**	1.02(1)	z = -.30	z = -.96	z = -2.79**	.95(3)
8	69.2(11)**	1.54(1)	z = -.56	z = -1.18	z = -3.30**	12.1(3)**
9	34.1(11)**	.87(1)	z = -.31	z = -.97	z = -.46	2.83(3)
10	23.3(11)*	.38(1)	z = -.60	z = -.99	z = -.36	2.28(3)
11	cc = .19*	1.21(1)	z = -.46	z = -.60	z = -.30	cc = .04
12	cc = .31**	.58(1)	z = -.24	z = -.20	z = -2.67**	cc = .13*

Notes: ** p < .01, * p < .05

Reading Table 3, it stands out that 'country' is the variable most statistically related to the different potential psychosocial contributions to rural extension (15 variables out of 16 are linked). Given samples were taken from 12 different countries, analyzing each case without adding contextual information would be a lengthy process and would not provide further insights. Thus, the assumption is that extensionists working in different countries tend to have different expectations of psychology.

'Sex' is related to contributions 1 and 2. In both cases, women are more likely to mention these psychosocial contributions (women mention them in 56% of the surveys while men 43% and 39%, respectively).

'Age' and 'experience' are also linked to several psychosocial contributions. In two opportunities, the psychosocial contributions to which they are related are the same, which is not unexpected, given that they are also related amongst themselves. One would expect younger extensionists to have worked fewer years as extensionists and vice versa, which is supported statistically (Spearman's $\rho = .78$; $p < .01$). Contributions 3 and 5 are more likely to be mentioned by younger and less experienced rural extensionists. Meanwhile, younger extensionists (independently of their experience) mention contribution 1 more frequently, while less experienced (but not necessarily younger) extensionists highlight variable A more frequently and more experienced ones (but not necessarily older) are more likely to point out variable C.

With regards to the 'maximum reached level of education', those with higher levels of education mention that psychology can contribute to rural extension more often, as well as the psychosocial contributions labeled as B, 7, 8 and 12, while the opposite occurs with contribution 3.

Also the variable 'University degree' is statistically related to several psychosocial contributions to rural extension. Contribution 2 is mentioned more often by extensionists with degrees in social sciences (69% of them), while in both cases the rest of professionals refer to them between 33%

and 52% of the cases. Likewise, extensionists with backgrounds in social sciences are also more likely to refer to contribution 8 (49% of them). In this case, this contribution is mentioned by 31% of agricultural engineers, 21% of veterinarians or engineers in animal husbandry and 19% of practitioners with other university degrees. Additionally, contribution 12 is mentioned more frequently by those with a social sciences degree and with degrees classified as 'others' (both are 9%), while the rest almost do not refer to it. Finally, contribution 3 is mentioned more often by agricultural engineers (24%), veterinarians or engineers in animal husbandry (34%) and other professionals (24%), than by extensionists with a degree in social sciences (only 3%).

DISCUSSION

More than 90% of the rural extensionists surveyed consider psychology could help, or contribute to enhancing, their practice. This high percentage is somewhat unexpected, considering that psychologists' practices have not traditionally addressed the particularities of rural scenarios (Landini, in press a; Landini et al., 2010) and rural extension is not generally considered as being a possible area of intervention for psychology (Landini et al, 2014; Muratgh & Landini, 2011). Two main consequences derive from this. First, there is a potentially high demand for psychologists or for psychosocial knowledge within the context of rural extension work. Second, despite having traditionally neglected rural extension as an area of intervention, psychology in general and community psychology in particular are presented with the great opportunity of contributing to rural extension and, in doing so, improving the quality of life and the auto-determination capacity of marginalized rural communities. Additionally, there is also the fact that the higher the level of education of an extensionist, the more interested they are in psychosocial contributions, perhaps because of being more familiar with its scope, which is encouraging if one assumes those with higher education are more likely to be institutional authorities. All this

paves the way for the question of how psychology could contribute to rural extension and how a community psychologist should position themselves with regards to rural extensionists' expectations.

Rural extensionists mention three different areas wherein psychologists or psychosocial knowledge could potentially contribute to rural extension practice. Almost 92% of the extensionists surveyed, who considered that psychology could contribute to their work, mentioned alternatives in which farmers were the beneficiaries of their actions, while this percentage decreased to 48% when talking about helping extensionists directly and to 7% when referring to contributions focused on the extension institution. Undoubtedly, asking for help to solve others' limitations (that is, farmers'), is easier than recognizing that they themselves need help. Perhaps this 'projection' of problems onto the farmers is a way of avoiding having to deal with their own limitations. As it has been argued, extensionists tend to find problems in the farmers (such as individualism, traditionalism and even backwardness) while neglecting the limitations and negative consequences of their own extension approaches (Landini, 2014, in press b; Landini, Bianqui & Russo, 2013). On the other hand, the scarce referral to potential contributions towards the functioning and organization of extension institutions seems to have a different cause which is the absence of knowledge with regards to psychologists' wide range of potential areas for intervention, thus highlighting the importance of providing information and alternatives when working in rural extension institutions.

Interestingly, less experienced rural extensionists are more likely to identify farmers as beneficiaries, perhaps due to the fact that they need more time as practitioners to become self-reflective and focus on their own role instead of focusing on their beneficiaries. In an investigation conducted in Paraguay, younger and less experienced extensionists proved to be less self-critical and more oriented to what farmers (and not they) had to do (Landini, Bianqui &

Crespi, 2013). On the contrary, rural extensionists with higher levels of education mentioned the possibility of psychologists working directly with them more frequently, which suggests education helps extensionists know more about a psychologist's role. Finally, more experienced (but not necessarily older) rural extensionists are more likely to suggest psychologists could contribute at an institutional level, perhaps due to having experienced more problems, conflicts or dysfunctional institutional functioning.

The two most commonly mentioned psychosocial contributions to rural extension are in regards to having the knowledge or ability to manage groups, implement participatory processes or work with interpersonal relationships. Given the fact that most rural extensionists in Latin America are agricultural engineers (Landini & Bianqui, 2014), and that they tend to perceive themselves as not having the necessary tools to manage groups (Landini, Murtagh & Lacanna, 2009), these expectations of psychology seem quite reasonable. Something similar happens with regards to participatory processes, which are considered an essential strategy in extension practice but in which extensionists are usually not trained (Landini, 2013). This constitutes a great opportunity not only for social psychologists, but also particularly for community psychologists, who have specific training in managing groups and conducting participatory processes (Montero, 2004).

Several variables proved to be related to these two areas of psychosocial contribution. Women and extensionists with university degrees in social sciences tended to mention said contributions more frequently. This suggests that women could be more concerned with interpersonal relationships in the context of rural extension, which could be relevant information when hiring extension personnel in the context of new approaches to rural extension, wherein brokering and building social capital is essential (Leeuwis & Aarts, 2011). Additionally, extensionists with backgrounds in social sciences also highlighted psychologists have the knowledge and training to manage groups and interpersonal relationships, perhaps due to their familiarity with the areas of

expertise of psychologists.

Surveyed practitioners also pointed out that psychologists could train, give advice and provide practical tools to rural extensionists. This implies helping them to improve what they do, which could be understood in terms of training human resources or working as consultants, two roles usually related to community psychology practice (Sánchez Vidal, 1991). Despite the fact that these expected contributions of psychologists are quite general, other categories offer additional clues for thinking about their role within rural extension.

Rural extensionists also expect contributions from psychology to increase farmers' adoption rate of new technologies and to change producers' mindset. This expectation is directly related to a traditional, diffusionist rural extension approach, characterized by a framing wherein the objective of rural extension is the transference of technologies and peasants and family farmers are considered to be traditionalist and backward (e.g. Rogers, 1963). In fact, despite being an out-of-date approach within the academic community (Leeuwis, 2004), it seems to be the most common approach in use in Latin America (Landini, 2014). More than four decades ago, Paulo Freire (1973) criticized this extension approach because it undervalued farmers' local knowledge and placed them in the position of objects. Without any doubt, this expectation is a result of the articulation between a diffusionist approach to rural extension and a traditional view of psychology as being one aimed at social control. Nonetheless, the question here is not how psychology could help reach this objective but how community psychologists should deal with it, given its contradiction with the core principles of this subdiscipline. A group of psychologists carried out a training process for rural extensionists in Paraguay (Landini, Bianqui & Russo, 2013), a country particularly characterized by a traditional extension approach (Landini, 2012), in which the objective was to address and reframe extensionists' conception of their practice. The proposal focused on facilitating a reflective process on the underlying assumptions thoughtlessly

accepted about extension practice, striving to generate a process of reevaluation and reframing, which proved to be effective in reaching their objectives, as determined by a qualitative and quantitative evaluation. This intervention, characterized as having a community psychology approach, is an interesting option when dealing with rural extensionists' diffusionist expectations and should be taken into account as a guideline for working in these kinds of contexts.

Four variables studied are linked to the expectation of increasing the adoption rate and changing farmers' mindset. Younger and less experienced practitioners tend to mention this expected contribution from psychologists more frequently. This result coincides with an investigation conducted in Paraguay, where the same variables proved related to a diffusionist extension approach (Landini, Bianqui & Crespi, 2013). Additionally, extensionists with lower levels of education point out more frequently that psychologists could help them to increase adoption rates of technologies and change farmers' mindset. When exploring possible interpretations, it could be argued that both having a higher education and more experience as a practitioner helps them to question the idea that university (formal) knowledge is the only valuable knowledge and understand that horizontal interactions with farmers are a prerequisite for culturally appropriate extension interventions.

Additionally, 26% of the surveyed rural extensionists who consider that psychology could help them, think psychologists could contribute by generating farmers' sense of ownership, motivation and dynamism with regards to development projects. As community psychology acknowledges, sense of ownership is strongly associated with beneficiaries' felt needs and is the result of having partaken in participatory processes (Montero, 2004). Thus, supporting farmers' sense of ownership towards rural development/extension projects implies facilitating real participatory dynamics aimed at generating and implementing said projects. In this case, younger and less experienced rural extensionists also point out this potential psychosocial contribution more

frequently, perhaps due to their lacking the experience and the tools to facilitate or manage these processes.

Rural extensionists also argue psychologists could help strengthen farmers' self-esteem and, in doing so, increase their motivation, given that they perceive that peasants tend to not trust their capacity to improve their conditions of life. Like psychologists (e.g. Palenzuela, 1996), rural extensionists relate low self-esteem to passivity and lack of active positioning. Freire (1970) pointed out that oppressed communities tend to have low self-esteem due to being undervalued by the society as a whole, which was corroborated by different studies (e.g. Páez et al. 2004; Palomar Lever y Lanzagorta Piñol, 2005). In this context, awareness as well as participatory processes conducted by community psychologists could play a fundamental role in increasing peasants' self-esteem and boosting dynamic and active attitudes, as many authors have shown (Cerullo & Wiesenfeld, 2001; Fals Borda, 1985; Martín-Baró, 1995).

From extensionists' point of view, psychologists could also help to understand farmers. This expectation arises from the fact that family farmers and peasants have their own, particular, rationale which does not coincide with either the extensionists' nor the market's (Landini, 2011; Landini, Leeuwis, Long & Murtagh, 2014; Paz & Bruno, 2013), leading extensionists to perceive peasants' rationale as making no sense (Landini et al, 2009). Thus, psychologists are called to unfold peasants' social meanings and practices in the context of rural extension, functioning here as mediators among social actors with different rationales and even different worldviews. Not surprisingly, extensionists with higher levels of education expect psychologists to fulfill this role more often, perhaps due to their being more aware of the fact that they also possess a rationale which is their own.

Extensionists also propose that psychologists could take part in interdisciplinary extension teams, which again demonstrates the limitations of a technical or productive approach to rural extension

(Carballo, 2002; Tsakoumagkos, González & Román, 2009). Not unexpectedly, extensionists with higher levels of education and those with a background in social sciences are more aware of the need for interdisciplinary rural extension work, due to its growing complexity (Sulaiman & Davis, 2012). Clearly, community psychologists have a great potential for contribution as part of interdisciplinary teams, particularly since the subdiscipline itself has an interdisciplinary approach, as Montero argues (Montero, 2004).

Although mentioned less often than other contributions, rural extensionists also expect psychologists to provide support in the areas of gender, youth and family, topics that are in line with traditional community psychology interests. Additionally, surveyed practitioners also expect psychologists help them 'reach' farmers through providing, in a wide sense, pedagogical and interpersonal communication support. Due to problems that sometimes arise when trying to transfer externally developed technologies, extensionists tend to perceive themselves as not being able to establish a productive relationship with farmers (Jansen, Steuten, Renes, Aarts & Lam, 2010). In this case, rural extensionists do not ask for tools to disseminate technologies, but for pedagogical insights or interpersonal strategies to strengthen the extensionist-farmer relationship and, in doing so, improve the outcome of the extension process. Although it is a subject not specifically addressed by community psychology, it is clear that psychologists involved in this line of thinking have tools and can provide useful insights when talking about adult education in community settings.

Finally, the low percentage of extensionists asking for clinical support for both extensionists and farmers is quite surprising. In fact, given psychological therapy is the most common and traditional intervention of psychologists, a higher reference to these topics was expected. The fact that it was mentioned scarcely suggests rural extensionists' expectations are not shaped primarily by traditional roles of psychologists but, instead, by their felt problems, which can be quite

important in the sense that any psychosocial contribution that works towards solving them will probably generate interest and support.

Statistical differences with regards to the expectations of psychology in the different countries were not analyzed in depth, due to the multiplicity of countries involved and the fact that 15 out of 16 contributions were related to the variable 'country'. In fact, a serious analysis of this would require a specific paper. Nonetheless, the fact that most extensionists' expectations of psychology are related to the extensionists' countries imply that psychologists working in this area should acknowledge that the countries' history as well as local variables will frame what is expected of them. Thus, the problems psychologists will have to face and the role that they will be allowed to assume will not be homogeneous and will vary from one country to another.

After analyzing rural extensionists' expected contributions from psychology, it became apparent that many of them are in line with community psychologists' approach and capacities. In this sense, working with groups of farmers, conducting participatory processes, helping understand farmers by acting as social mediators, training and advising rural extensionists, partaking in interdisciplinary teams and providing support in the area of interpersonal communication and adult education, are all possible areas to which the field of psychology could contribute, amongst others. Other expectations such as providing tools and strategies to increase farmers' adoption rate of new technologies and changing their mindset are against community psychology's core principles, however. Thus, there will be opportunities in which rural extensionists' expectations will be helpful to catalyze a working-together process, but others in which they will have to be put up for discussion. This leads to an additional role of community psychologists in the context of rural extension: catalyzing and facilitating rural extensionists' process of critical reflection on their practice and underlying assumptions (Landini, Bianqui & Crespi, 2013), which is in line with Freire's proposal for supporting awareness processes. In the context of this analysis, it

seems to be a necessary, but not sought for, role.

Additionally, there are other potential (yet unmentioned) areas for community psychologists' interventions. Firstly, there is the empowerment of peasants' and other family farmers' groups and organizations. In the context of rural extension, different authors have pointed out the importance of strengthening farmers' organizations (Dirven, 2003), increasing individuals' and collectives' capacities to identify problems and generate solutions (Pérez & Clavijo, 2012) and developing critical thinking (Ortiz, 2009). Undoubtedly, community psychologists are highly prepared to fulfill these roles. Secondly is the facilitation of interinstitutional networking, as a key element of rural extension practice (Sulaiman, & Davis, 2012). In this vein, contributing to the communication between institutions and other social actors in the context of platforms aimed at designing strategies for local/rural development or the management of natural resources, stand out.

One of the limitations of this paper and its approach (besides the issue of the representativity of the samples), is the lower percentages with which some of rural extensionists' expectations of psychology were mentioned. On the one hand, it means they are not as important for the group or collective as those with higher percentages are. However, taking into account the open structure of the questions, the mere existence of the references implies that these expectations are understandable and make sense for rural extensionists, even when not referred to directly, thus proving to be useful when communicating and interacting with them.

Additionally, given that rural extensionists have limited knowledge of the capabilities of psychologists in general and even less of community psychologists in particular, the active position of proposing possible roles for psychologists to extension authorities seems to be essential. In consequence, providing information regarding what community psychology could do appears to be an interesting way to open the possibility of psychologists working in rural

extension.

CONCLUSIONS

Psychologists in general and community psychologists in particular have an important potential for contributing to rural extension and, in doing so, empowering underprivileged and marginalized, poor farmers' communities. Nonetheless, this potentiality seems to be neglected by community psychologists around the world, at least in general terms, despite most rural extensionists' consideration that psychology could help them to solve their problems and enhance their practice. Thus, community psychologists seem to be faced with a big opportunity (which also constitutes a great responsibility): that of working in the field supporting rural extensionists' work with peasants and other family farmer communities. General guidelines to carry out this role have been mentioned in this paper. However, much remains to be clarified. In any case, not having everything clear cannot be an excuse for not trying. In fact, this always will be an inherent part of the complexity of a community psychologists' role.

REFERENCES

- Abdu-Raheem, K., Worth, S. (2012). Agricultural extension in the facilitation of biodiversity conservation in South Africa. *South African Journal of Agricultural Extension*, 40, 36-47.
- Acunzo, M., Pafumi, M., Torres, C. & Tirol, M. (2014). *Communication for rural development*. Rome: FAO.
- Aguirre, F. (2012). *El nuevo impulso de la extensión rural en América Latina. Situación actual y perspectivas*. Santiago, Chile: Latin American Network for Rural Extension Services (RELASER).
- Aleman, C. & Sevilla, E. (2007). ¿Vuelve la extensión rural? Reflexiones y propuestas

agroecológicas vinculadas con el retorno y fortalecimiento de la extensión rural en América Latina. *Realidad Económica*, 227, 52-74.

Ardila, J. (2010). *Extensión rural para el desarrollo de la agricultura y la seguridad alimentaria: aspectos conceptuales, situación y una visión de futuro*. San José, Costa Rica: IICA.

Carballo, C. (2002). *Extensión y transferencia de tecnología en el sector agrario argentino*. Buenos Aires: University of Buenos Aires.

Cerullo, R. & Wiesenfeld, E. (2001). La concientización en el trabajo psicosocial comunitario desde la perspectiva de sus actores. *Revista de Psicología de la Universidad de Chile*, 10(2), 11-26.

Chavarría, H. (Ed.) (2013). *Perspectivas de la agricultura y del desarrollo rural en las Américas: una mirada hacia América Latina y el Caribe 2014*. San José, Costa Rica: IICA

Christoplos, I. (2010). *Cómo movilizar el potencial de la extensión agraria y rural*. Rome: FAO.

Dirven, M. (2003). Entre el ideario y la realidad: capital social y desarrollo agrícola, algunos apuntes para la reflexión. In R. Atria, M. Siles, I. Arriagada, L. Robison & S. Whiteford. (Comp.), *Capital social y reducción de la pobreza en América Latina y el Caribe: en busca de un nuevo paradigma* (pp. 397-446). Santiago, Chile: Economic Commission for Latin America and the Caribbean.

Fals Borda, O. (1985). *Conocimiento y poder popular. Lecciones con campesinos de Nicaragua, México y Colombia*. Bogotá: Siglo XXI.

Freire, P. (1970). *Pedagogía del oprimido*. Buenos Aires: Siglo XXI.

Freire, P. (1973). *¿Extensión o comunicación? La concientización en el medio rural*. Buenos Aires: Siglo XXI.

- Jansen, J., Steuten, C., Renes, R., Aarts, N., & Lam, T. (2010). Debunking the myth of the hard-to-reach farmer: Effective communication on udder health. *Journal of Dairy Science*, *93*, 1296–1306.
- Landini, F. (2007). Teorías del desarrollo y del subdesarrollo: ¿Sólo una incumbencia de la ciencia económica? Algunos aportes desde la psicología comunitaria. In E. Saforcada, N. Cervone, J. Barrera, A. Lapalma & M. De Lelis (Comp.), *Aportes de la psicología comunitaria a problemáticas de la actualidad latinoamericana* (pp. 273-291). Buenos Aires: University of Buenos Aires.
- Landini, F. (2011). Racionalidad económica campesina. *Mundo Agrario*, *12*(23). Retrieved Dec 9, 2014, from http://www.scielo.org.ar/scielo.php?pid=S1515-59942011000200014&script=sci_arttext
- Landini, F. (2012). Problemas en la extensión rural paraguaya: modelos de extensión en la encrucijada. *International Journal of Rural Development*, *9*(69), 127-149.
- Landini, F. (2013). Necesidades formativas de los extensionistas rurales paraguayos desde la perspectiva de su función, sus problemas y sus intereses. *Trabajo y Sociedad*, *20*, 149-160.
- Landini, F. (2014) *Concepción de extensión rural en 10 países latinoamericanos*. Manuscript sent for publication.
- Landini, F. (in press a). La noción de psicología rural y sus desafíos en el contexto latinoamericano. In F. Landini (Ed.), *Hacia una psicología rural latinoamericana*. Buenos Aires: Latin American Council of Social Sciences.
- Landini, F. (in press b). Problemas de la extensión rural en América Latina desde el punto de vista de los extensionistas. *Perfiles Latinoamericanos*.
- Landini, F., Benítez, M. & Murtagh, S. (2010). Revisión de los trabajos realizados por la psicología sobre pequeños productores agropecuarios. *Anuario de Investigaciones*, *17*(1), 221-

229.

Landini, F. & Bianqui, V. (2014). Socio-demographic profile of different samples of Latin American rural extensionists. *Ciência Rural*, 44(3), 575-581.

Landini, F., Bianqui, V. & Crespi, M. (2013). Evaluación de las creencias sobre extensión rural de los extensionistas paraguayos. *Psiencia*, 5(1), 3-14

Landini, F., Bianqui, V. & Russo, M. (2013). Evaluación de un proceso de capacitación para extensionistas rurales implementado en Paraguay. *Revista de Economía e Sociología Rural*, 51(sup1), s009-s030.

Landini, F., Leeuwis, C., Long, N. & Murtagh, S. (2014). Towards a psychology of rural development processes and interventions. *Journal of Community and Applied Social Psychology*, 24(6), 534–546.

Landini, F., Long, N., Leeuwis, C. & Murtagh, S. (2014). Theoretical guidelines for a psychology of rural development processes and interventions. *International Journal of Rural Development*, 11(74), 125-147.

Landini, F., Murtagh, M. & Lacanna, C. (2009). *Aportes y reflexiones desde la psicología al trabajo de extensión con pequeños productores*. Formosa, Argentina: National Institute for Agrarian Technology.

Leeuwis, C. (2004). *Communication for rural innovation. Rethinking agricultural extension*. Oxford: Blackwell Science.

Leeuwis, C. & Aarts, N. (2011). Rethinking communication in innovation processes: Creating space for change in complex systems. *Journal of Agricultural Education and Extension*, 17(1), 21-36.

Leite, J. & Dimenstein, M. (Org.) (2013). *Psicologia e contextos rurais*. Natal, Brasil: Federal Univesity of Rio Grande do Norte

- Martín-Baró, I. (1995). Procesos psíquicos y poder. In M. Montero (Comp.), *Psicología de la acción política* (pp. 205-233). Barcelona: Paidós.
- Montero, M. (1994). Vidas paralelas. Psicología Comunitaria en Latinoamérica y en Estados Unidos. In M. Montero (Ed.), *Psicología social comunitaria. Teoría, método y experiencia* (pp. 19-46). México: University of Guadalajara.
- Montero, M. (2004). *Introducción a la psicología comunitaria: desarrollo, conceptos y procesos*. Guadalajara: University of Guadalajara.
- Murtagh, S. & Landini, F. (2011). Producción científica de la psicología vinculada a pequeños productores agropecuarios con énfasis en el ámbito del desarrollo rural. *Interamerican Journal of Psychology*, 45(2), 293-304.
- Nederlof, E., Wennink, B. & Heemskerk, W. (2010). *Access to agricultural services*. Amsterdam: Royal Tropical Institute.
- Omar, J., Bakar, A., Jais, H. & Ibraik, F. (2011). A review study of the reorganization of agricultural extension toward sustainable agricultural development. *International Journal of Engineering Science and Technology*, 3(5), 4358-4366.
- Ortiz, R. (2009). *Evolución de los servicios de extensión en Nicaragua*. Rome: FAO.
- Ortiz, R., Mejía, F., Ceville, X., Preissing, J., Boerger, V., Solórzano, N., Meyrat, M., Marín, X. & Morrás, E. (2011). *Buenas prácticas en el manejo de extensión en América Central*. Rome: FAO.
- Ortiz, R., Rivera, O., Cifuentes, I. & Morrás, E. (2011). *Estudio de sistematización de buenas prácticas de extensión en Guatemala*. Guatemala: FAO.
- Páez, D., Zubieta, E., Mayordomo, S., Jiménez, A. & Ruiz, S. (2004). Identidad. Auto-concepto, auto-estima, auto-eficacia y locus de control. In D. Páez, I. Fernández, S. Ubillós & E. Zubieta (Coords.), *Psicología social, cultura y educación* (pp. 125-193). Madrid: Pearson.

- Palenzuela, D. (1996). Reactancia e indefensión. In A. Fierro (Comp.), *Manual de psicología de la personalidad* (pp. 211-254). Barcelona: Paidós.
- Palomar Lever, J. & Lanzagorta Piñol, N. (2005). Pobreza, recursos psicológicos y movilidad social. *Revista Latinoamericana de Psicología*, 37(1), 9-45.
- Paz, R. & Bruno, S. (2013). The potential of family agriculture and protected spaces: guidelines for public policies design. *Mundo Agrario*, 13(26). Retrieved July 15, 2014, from http://www.scielo.org.ar/scielo.php?pid=S1515-59942013000100007&script=sci_arttext
- Pérez, M. & Clavijo, N. (2012). *Experiencias y enfoques de procesos participativos de innovación en agricultura. El caso de la corporación PBA en Colombia*. Rome: FAO.
- Rogers, E. (1962). *Diffusion of innovations*. Nueva York: Free Press.
- Sánchez Quintanar, C. (Ed.) (2009). *Psicología en ambiente rural*. México: Plaza y Valdés.
- Sánchez Vidal, A. (1991). *Psicología comunitaria. Bases conceptuales y operativas, métodos de intervención*. Barcelona: Promociones y Publicaciones Universitarias..
- Sulaiman, R. & Davis, K. (2012). *The "New Extensionist": Roles, strategies, and capacities to strengthen extension and advisory services*. Lindau, Switzerland: Global Forum for Rural Advisory Services.
- Trigo, E., Mateo, N. & Falconi, C. (2013). *Agricultural innovation in Latin America and the Caribbean: Institutional scenarios and mechanisms*. Washington: IDB.
- Tsakoumagkos, P., Gonzalez, M. & Román, M. (2009). *Tecnología y pequeña producción agropecuaria en la Argentina. Una caracterización basada en el Censo Nacional Agropecuario 2002 y en estudios de caso*. Buenos Aires: Ministry of Agriculture, Husbandry and Fisheries.
- Zwane, E. (2012). Does extension have a role to play in rural development? *South African Journal of Agricultural Extension*, 40, 16-24.