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Psychology's Contributions to Extension: State of the Art and Calls to Action

Abstract

Several psychosocial processes are embedded in the practice of extension. However, there is no *Journal of Extension* article that systematically addresses how psychology can contribute to the field. Research conducted recently in Latin America addresses this issue and is applicable to those working in U.S. Cooperative Extension. The aim of this article is to provide an overview of possible contributions psychology can make to U.S. Cooperative Extension. These contributions are presented in the context of seven aspects of extension practice that have strong psychological components. Calls to action are presented as well. Essentially, extension organizations need to acknowledge the potentiality of psychology and invite psychologists to be part of their programs and research.

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Introduction

Extension, as understood within the U.S. Cooperative Extension System, is a complex and diverse practice whose practitioners, through different programs and actions, aim to improve the quality of people's lives using evidence-based science (Atilles & Eubanks, 2014; Wang, 2014). Extension practice is not about knowledge and technologies per se but is instead about generating changes at individual, group, and community levels that improve people's lives and generate development.

Even when extension's direct objectives may be strongly linked to technologies (e.g., changes in agricultural practices and technology adoption), these objectives are always mediated by human agency (Landini, Long, Leeuwis, & Murtagh, 2014). Therefore, having an understanding of social sciences is necessary for all extension practitioners, given that the purpose of extension programming is to modify human behavior

(Beaulieu & Cordes, 2014).

In this context, the fact that psychology has delivered only scarce solid and critical contributions to the field of extension is surprising (Murtagh & Landini, 2011), as is the limited amount of attention paid by extension personnel to this science. From the technology transfer perspective, Rogers (1983) pointed out that "to argue that economic factors are the sole predictors of rate of adoption is ridiculous" (p. 215). Nevertheless, it seems that psychologists have not offered solid and systematic contributions to the field of extension, nor have extension workers consistently turned to psychology for answers to their practical problems. This is evident in the lack of *Journal of Extension* articles that systematically address the contributions made by psychology to U.S. Cooperative Extension.

Recently, psychologists in Latin America have made an interesting attempt at sparking the debate on potential contributions from psychology to extension practice (Landini, 2015; Landini, Leeuwis, Long, & Murtagh, 2014). In research conducted in 12 Latin American countries, 90.6% of the extension practitioners surveyed argued that psychology could make real contributions to their practice, particularly in areas such as group management, cooperative behaviors, participatory processes, motivation, and gender issues, among others (Landini, 2015). Nonetheless, it was found that only in Uruguay do psychologists have a clear presence as extension practitioners supporting the strengthening of rural community organizations (Landini & Riet, 2015). In this article, we will reference some of these contributions and present some calls to action that would improve extension practice by means of contributions from the field of psychology.

Areas of Contribution

Often, psychology is known solely as being a clinical practice within the context of mental health. Nonetheless, psychology is an ample science that encompasses multiple subdisciplines, some of which address subjects relevant to the practice of extension. Such subdisciplines include clinical, community, educational, environmental, organizational, and social psychology, among others.

It is clear that the field of psychology involves both knowledge and capabilities that could be useful for extension practice. However, in general terms, psychology does not include extension as a subdiscipline or specific area of interest, research, or intervention. Moreover, psychological knowledge must be adapted to meet the needs of extension personnel for it to be relevant to their practice. Herein, we propose seven aspects of extension that have strong psychological components.

1. Interpersonal relationships and cultural competence. Interpersonal trust and credibility are invaluable assets when working with people, communities, and various partners within the field of extension (Landini, 2016). Additionally, U.S. Cooperative Extension workers have to build cultural competences (Betancourt, Green, Carrillo, & Ananeh-Firempong, 2003) so as to better serve the increasingly ethnically and culturally diverse U.S. population (Atilas & Eubanks, 2014; Henning, Buchholz, Steele, & Ramaswamy, 2014). Thus, there is no doubt that social and community psychology can make important contributions related to the study and understanding of interpersonal attitudes, social interaction, and interpersonal communication (Franzoi, 2007).

2. Group processes and cooperative behaviors. An important part of extension practice takes place in the context of group or collective settings (Sligo & Massey, 2007). Such settings include 4-H youth development groups (Borden, Perkins, & Hawkey, 2014), interinstitutional partnerships, extension councils, and farmers' training groups, among others. Moreover, when extension professionals are involved in programs aimed at community and economic development, the construction of social capital and the encouragement of

cooperative attitudes are of utmost importance. In these contexts, group leadership, cooperative behaviors, conflict management, and mediation play important roles. Psychological knowledge is relevant for dealing with these issues.

3. Learning processes and human resource development. Extension practice is essentially a process of nonformal education (Torock, 2009). Depending on the context, education and learning in extension involve a wide array of strategies, from the transfer of knowledge to the development of life skills, and from experiential to virtual learning. Psychology has great potential as a contributor to such learning processes, particularly with regard to adult education. Additionally, organizational psychology is significantly linked to on-the-job training, and community psychology to social learning, with both subdisciplines aimed at developing practical capacities for dealing with changing and complex environments (Guillén, 2009). Thus, psychology seems relevant to understanding and facilitating these different learning processes (Massey, Morriss, Alpass, & Flett, 2004) for both beneficiaries and extension personnel.

4. Participation, engagement, and ownership. Development processes and extension programs need the participation and engagement of all stakeholders to be sustainable (Prokopy et al., 2012). Without stakeholder participation and involvement, extension simply is not possible. Bennett (1975) recognized this importance and included participation as a key step in his renowned model of evaluation (hierarchy of evidence for program evaluation). Thus, it is fundamental that extension proposals respond to clients' and communities' needs and that recipients participate throughout the process (Borden et al., 2014). Community psychology has a long-standing tradition in the study of people's participation, engagement, motivation, and ownership (Nelson & Prilleltensky, 2010), which could be very useful for extension practice.

5. Technology adoption, behavioral change, and innovation processes. Most of the contributions psychology has made to the field of extension have been in the realm of technology adoption (Straub, 2009). Along this line, psychology has much to contribute to the study and understanding of processes of behavioral change (Pratt & Bowman, 2008) in different areas, such as classical technology adoption and incorporation of proenvironmental practices (Holahan, 2011) and healthful habits. In addition, it can contribute to understanding and fostering of more complex processes, such as non-predefined technological or organizational innovations, through interaction, reflection on practice, and social learning (Leeuwis & Aarts, 2011).

6. Evaluation and accountability. Accountability to clients regarding the use of public funds is an important concern within U.S. Cooperative Extension and elsewhere (Beaulieu & Cordes, 2014; Borden et al., 2014; Christoplos, Sandison, & Chipeta, 2012). Scholars and practitioners in the United States have tended to focus on either subjective measures (e.g., satisfaction with the service) or hard data (e.g., technology adoption). In this context, psychology could help generate new indicators as well as provide new strategies for measuring nontraditional results and impacts, such as improvements in quality of life, self-esteem, and community trust and networks.

7. Reflection on practice and continuous innovation. Reflection is a key component of both experiential learning (Torock, 2009) and innovation processes. The recent celebration of the 100th anniversary of U.S. Cooperative Extension indicates that the organization has had to constantly adapt to changes in the environment and to innovate in order to survive and remain relevant. Studies in organizational psychology and related scientific disciplines have shown how organizational learning and innovations occur and how they can be fostered (Fitzpatrick, 2006; Kim, MacDonald, & Andersen, 2013). Consequently, psychology could help U.S. Cooperative

Extension workers and institutions remain vigilant and reflect on their practice so as to facilitate individual learning and institutional innovation, or as Beaulieu and Cordes (2014) put it, to "help Extension re-imagine itself" ("Important Challenges and Opportunities Ahead," subheading 6).

Reflections and Calls to Action

Several aspects of extension practice have strong psychosocial components. However, psychologists rarely have addressed extension and extension workers rarely have looked to psychology to make contributions to their work. Overall, this situation has led us to reflect on the potential of infusing extension with psychology and to formulate associated calls to action.

Firstly, extension workers and extension institutions have to acknowledge the importance that psychosocial knowledge has for extension practice, relative to both technology transfer and human resource development perspectives. Without this recognition, it will be impossible to benefit from this knowledge.

Secondly, an open and permanent dialogue between extension workers and psychologists is needed. Nowadays, most extension personnel do not have a clear picture of how psychologists can contribute to their work, and most psychologists are unfamiliar with extension settings and practices and thus cannot provide sound and contextualized contributions to this area.

Thirdly, institutions associated with extension, such as those in the U.S. land-grant university system, should find ways to encourage psychologists to train and work as extension practitioners. This practical experience will let extensionists see how psychology can contribute to their practice in real settings and will allow psychologists to understand the applicability of their knowledge to extension practices.

Finally, researchers and extension practitioners should invite and encourage psychologists to conduct research related to extension practice. In this way, psychologists will be able to provide extensionists with evidence-based knowledge specifically developed for extension settings and for addressing extension staff needs.

The objective seems to be clear: to improve extension through the support of psychology. However, the path is uncertain, and the results will depend on practitioners' and extension authorities' initiatives and commitment. We encourage those working in extension in the United States and elsewhere to carefully analyze how psychology could contribute to their practice and, more importantly, to invite psychologists to partake in it. Successfully achieving extension goals will definitely make doing so worth the effort.

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