

## Chapter 15

# Assessment of Competence Research and Innovation in Higher Education: The Case of Graduates in Postgraduate Studies in Administration

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### ABSTRACT

*The research's main objective was to assess the levels of development of innovation and research skills of the graduates of graduate programs in administration. The previous literature consulted for the study is made up of the contributions of Hernández, Alvarado, and Luna (2015), Amarista (2014), Valdés, Vera, and Carlos (2012b), and Vila, Dávila, and Ginés (2010). The type of study was a quantitative methodology employed a cross-sectional exploratory - descriptive. The instrument designed to obtain field information was based on a Likert scale questionnaire. The sample consisted of 126 graduates distributed in three graduate management programs. The main results of the study were that graduates globally have inadequate control of their innovation skills and a moderate level of development of their skills in research. The main conclusion of the investigation was that it is transcendental to consider the innovation as a strategic area not only in education but also in the economic and social system of a country.*

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## INTRODUCTION

Graduates of postgraduate programs constitute in any country the social group that accumulates a greater volume of human capital because it has been the longest in its training and has also required greater investment. These graduates provide the labor sector with a set of skills developed during their studies related to the capacity to generate innovation through the creation of new knowledge (Vila, Dávila & Ginés, 2010).

In this sense, research and innovation are key components in the development of knowledge, skills and attitudes that society demands, allowing different interest groups to use them as tools to eradicate poverty, promote sustainable development and progress for the country (World Conference on Higher Education, 2009).

Likewise, Etzkowitz (2003) considers that the scientific and technological development of a country is possible when a congruence of objectives and actions among the different actors of social development occurs as it establishes the model of the “Triple Helix” in which it is argued that the axis of development is in the interaction of three institutional spheres: government, business / industry and higher education. In this perspective, the higher education institutions (HEI) are defined as forming important actors within the networks of regional groups conducting and knowledge-based systems that constitute regional innovation activities (Braczyk, Cooke, & Heidenreic, 2003).

Thus, the ability of stakeholders to innovate depends on their ability to acquire knowledge and to apply it, that is, to manage it (Tidd, Bessant & Pavitt, 2005 & Courvisanos, 2007). Therefore, the relevant element of this management is to enable people to have access to higher education because it is the fundamental strategy for organizations to establish innovation processes (Fuente, 2005, Tejada & Navío, 2005, García, 2008 & Rasiah, 2011).

Also, this innovation oriented training is necessary to develop the following competencies: critical thinking and problem solving; Network collaboration; Agility and adaptability; Initiative and entrepreneurial spirit; Effective oral and written communication; Access and analysis of information, as well as imagination and creativity (Fluellen, 2011 & Bruton, 2011).

Thus, the potential of innovation that the graduates contribute is a fundamental determinant both for the success in their professional career and for the total efficiency of the production systems in the different countries. Therefore, postgraduate studies contribute to the development of competences focused on generating new knowledge and taking decisions to put them into use, as well as for the mobilization of the resources of the organization (Vila, Dávila & Ginés, 2010).

In this way, for the overall development of a country, the knowledge economy believes that the most important asset is the creation, use and dissemination of knowledge (Sanchez and Rivers, 2011) so the relevance of both the human capital is emphasized as the management of the new knowledge, innovation and development of human capacities as sources of sustainable economic growth (ECLAC, 2008 and Portnoi, Rust and Bagley, 2010).

Thus, education not only allows individuals to add value to the economy but contribute to cultural heritage, participate in society, improve the health of their families and communities, preserve the environment and to enhance their capacity to continue its growth (UNESCO, 2009).

In this sense, education has become the main input which function is the formation according to the needs imposed by globalization. What is important is to promote scientific and innovative technological

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