Employee Mobility & Human Capital in Higher Education Level: The Moderating Role of the Opportunity Cost of the Employee on Employees´ Mobility Intentions

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Abstract

This study proposes for organizations with intensive use of knowledge, a model that predicts the employees´ mobility intentions, which includes not only the perceptions that employees have of extrinsic and intrinsic rewards received, and perceived organizational support to human capital, but also introduces the opportunity cost of the employee, as moderator of the relationship between rewards and intention to leave the organization. The data used was collected from different public and private universities in Colombia. The global model allows to proof of the existence of negative correlations between the exogenous constructs and the endogenous construct, as well as knowing the opportunity cost moderation in relations between the rewards described and intention to leave the organization. Findings suggest that in organizations with intensive use of knowledge, the perceptions that knowledge employees have, are an important predictor of intention to withdraw, therefore these perceptions could be an important input for managers, so as to devise policies and plans that include and facilitate high performance and satisfaction for high performance employees.

Dedication

I dedicate this great effort and culminate it the joy of my children, who are still of school age; and my wife, who had the patience and the courage to not give up, and support me in accomplishing what is now my life project, and that has led me to live each day with greater intensity, tenacity and gratitude. I give the Lord of my life this great work you've put into my hands, I want to say that it has required me to tears, and I did not give up, I know I gave my best in every stage of it, since I began my doctoral studies until today when I finish with the satisfaction of having given the best of me every day.

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Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction

This study analyzes in the field of higher education, a sector characterized by intensive use of knowledge, decision-making of high-performing employees with respect to stay or leave the company they work for from the analysis of the relationships between the independent variables: external rewards, internal rewards, and human capital, and the dependent variable: employees´ mobility intentions; the first two moderated by the opportunity cost of the employee. In this sense, this quantitative study is based on a significant research problem related to employees´ mobility intentions, which represents a loss of human capital in the professional service sector companies, specifically companies with intensive use of knowledge.

This study describes from perceptions the behavior of employees in the industry of higher education, specifically professors with the full-time employment contract, from the interrelationships between the constructs identified in the literature review. In this sense, the nature of this study is descriptive and explanatory (Saunders, Lewis, and Thornhill, 2012) because knowing that two or more variables are related to employees´ mobility intentions, and also these relationships are affected by the moderation of the variable opportunity cost of employees, it provides some explanatory information which helps predict the possible future behavior of professors, regarding their intention to staying or leaving the University.

The literature reviewed about this topic permitted to find some studies that have analyzed turnover intention, and its effects on companies. Cotton and Tuttle (1986) did a meta-analysis about employees´ mobility intentions, and they found out that variables affecting it could be classified in three factors: (a) external factors (b) structural factors or related to work, and (c) factors associated with employees' personal characteristics; however, these authors suggested that the most important discovery consisting of determining, not

only variables that have a cause relationship with employee mobility, but also moderating variables affecting this relationship.

Griffeth, Hom and Gaertner (2000) did another meta-analysis about employees´ mobility intentions, and they found out other factors associated with the performance of employees, such as organizational commitment, employees' age, gender, and incentives (e.g. individual and collective). They emphasized the fact that there should be more attention on moderating variables, because of their ability to influence the relationship between independent variable and dependent variable.

A recent study by Campbell, Ganco, Franco and Agarwal (2012) found that not only employees´ earnings affect employees´ mobility intentions, and they suggested that it is not enough to understand it if only discussing the income and benefits. Juma and Lee (2012) and Newman and Sheikh (2012) found that it was necessary to study the influence of extrinsic and intrinsic rewards on employees` mobility intentions to understand this phenomenon better. Martín (2011) suggested for future studies to analyze employee retention from the point of view of the employee; this means examining the employee's intention to remain or withdraw from the organization, because this level of analysis allows to research the exact perception of employee about HR practices in organizations for which he/she work for, and the impact on his/her behaviors and attitudes; Yip (2014) suggested to carry out a research that incorporate rewards systems compatible with the opportunity cost concept, for this reason this study included this construct as the moderator variable; and Greenberg and Spiller (2015) suggested that includes the opportunity cost in decision-making in future research, because it has received little attention in the literature; and they found that the opportunity cost generates large differences in preferences of people.

One of the biggest competition fields among companies is the attraction and retention of human talent; this has to do with the fact that this activity is directly related to employees´

mobility intentions. (Mehta, 2011). “Talent is behavior. Talent, however, cannot be taught. As someone one said, you can teach a turkey to climb a tree, but it is easier to hire a squirrel.” (p. 44). Employees´ mobility intentions are a reality that has happened since entrepreneurial activity started, and will continue happening, it is for this reason that companies are aware of the need to create strategies to reduce staff turnover rate because it affects the organization’s success.

According to Mehta (2011) companies are failing in identifying the main reasons which make high-performance employees leave companies. This study proposes that this essentially has to do, with a problem related to management of human talent and that involves different variables. “The challenge for employers is to ensure that employee mobility… can be accommodated to ensure a positive work environment for employees while maintaining a high standard of performance” (Burns & Christie, 2013, p. 345). It is vital that employee and employer perceive a high satisfaction level to achieve high effectiveness and organizational standards (Ahmad & Yetka, 2010).

Due to the fact that employee mobility generates serious problems for companies, the following research questions are critic in strategic management of human capital: (a) how much do variables like extrinsic rewards, intrinsic rewards and human capital influence an employee’s intentions to stay or to leave the company he/she works for?; (b) is there a difference in the decision-making of professor to stay or to leave the University for he/she works for, influenced by the moderating variable opportunity cost of the employee, taking into account his/her perceptions related to the extrinsic rewards and the intrinsic rewards that he/she receives?; and (c) conditional upon the intention to leave the University: is there a difference between the professor who choose to create a new venture and those who want to link to another organization?

A theoretical reasoning is developed to answer these questions about the variables that affect the employees´ mobility intentions, and how the moderator variable affects them. The research questions examine the empirical context of higher education services industry, which is a professional service sector where specialized staff turnover is critical, because the organization suffers from a loss of cumulative human capital generating higher costs (Choi, Lee, Wan, & Ahmad, 2012; Park & Shaw, 2013). Data used here comes from professors who work at higher education level in Colombia.

It was expected to find support for suggested hypotheses, in the sense of knowing, in the first instance, if the perception that professors have the rewards they receive, and the value that the University gives the human capital influence their intention to leave the University; secondly, if the opportunity cost moderates both relationships between extrinsic rewards and employees' mobility intentions as intrinsic rewards and employees' mobility intentions; and finally, if the professors who expressed their intention to leave the University and chose to create a company, were characterized by better rewards and because they perceive organizational support of human capital (Nicolaou & Souitaris, 2015).

In the questions presented before, there is a contribution to literature and strategic management for companies and human capital. In this sense, the study design includes the recommendations of meta-analyses by Cotton and Tuttle (1986), Griffeth et al. (2000) and Barak, Nissly, and Levin (2001); the study analyzes the relationship between variables interrelated with employees´ mobility intentions, these variables are extrinsic rewards, intrinsic rewards (Campbell et al., 2012; Juma & Lee, 2012; and Newman & Sheik, 2012), and human capital (Martín 2011). Additionally, the study not only determined the predictive power of the independent variables on the dependent variable employees' mobility intentions but also analyzed the effect generated by the opportunity cost of the employee. About this, Nicolaou and Souitaris (2015) found that high-performing academics who had a higher

opportunity cost of leaving the University for they work for, they were more likely to create a new venture. Additionally, they found that professors who had a better perception of rewards and support they received to develop their ideas, were more likely to stay in University. Because Nicolaou and Souitaris (2015) cannot empirically prove if the perceptions about support caused the decision to stay or to leave, rather than the decision caused these perceptions, following these academics, this study did not claim causality but instead hypothesized an association between perceptions of rewards and the stay/leave decision, and between perceptions of support for human capital.

The model proposed in this study helped to understand: (a) if the perception that the professor has about extrinsic rewards, intrinsic rewards, and support for human capital affecting his/her decision to stay or to leave the University; (b) if the perception that the professor has about extrinsic rewards and intrinsic rewards changing his/her decision to stay or to leave the University, due to the effect of moderating variable opportunity cost of the employee; and (c) if the professor expressed the intention to leave the University, what kind of decision he/she would take: to create a new venture or join to another organization. By another side, the study improved the understanding of how higher education organizations could generate profit relationship, between professors and directives that help these institutions to retain the best individuals, and meet the objectives of teaching, research and outreach to society.

Furthermore, some researchers have considered that to have a better understanding of the studies on employees' mobility intentions, they must be supported in the disciplines of psychology, sociology, and economics. In this sense, the discipline of economics, according to Strober (1990) suggested that employees' knowledge and ability are cumulative capital which is important to preserve in time; the discipline of sociology, according to Blau (1964) proposed that people who join companies in exchange for rewards; and the discipline of

psychology, according to Wright and Cropanzano (1998), suggested that employees' perceptions and attitudes about working conditions lead to behavioral outcomes. Returning to Blau (1964) when a person takes this kind of decision, he/she is giving up something to get something he/she wants (Krugman & Wells, 2006), because the value placed on whatever must be sacrificed; it does, to obtain it (Heyne, Boettke, & Prychitko, 2003).

Background of the Problem

Employees´ mobility intentions have been recognized as the primary concern in professional services enterprises because "the productive capacity is concentrated in human capital, [specifically] in the skills, abilities, and knowledge of employees" (Lin & Chang, 2005, p. 336). According to these authors, employee mobility is: (a) expensive (b) reduces employees' efficiency, and productivity (c) causes loss of trust in clients, and (d) increases dissatisfaction in clients. Additionally, employees' knowledge, skills and abilities (KSAs) are not easily transferred from one employee to another, because these are part of the knowledge embodied in human capital. About this, Lin and Chang (2005) identified three primary categories that contribute to employee mobility: demographic factors (e.g. age, education, job level, gender, and tenure with the organization); professional perception (e.g. organizational commitment, professional commitment, work satisfaction, motivation potential, values conflicts, burnout); and organizational conditions (e.g. stress, social support, fairness-management practice, physical comfort, and organizational culture) (p. 336).

International research in employees´ mobility intentions is abundant, and the effects that it has generated in the enterprise performance emphasize that: (a) the complementary active value in a company affect the intention of employees to leave the company, and impacts the business performance negatively (Campbell et al., 2012); (b) human assets are a sustainable source of competitive advantage, because tacit knowledge is hard to imitate (Coff, 1997); (c) "most entrepreneurs come from established organizations" (Sørensen & Fassiotto,

2011, p. 1322); and (d) there is a relationship between employee turnover and destruction of value in the companies (Schumpeter, 1934).

In this regard, Aime, Johnson, Ridge, and Hill (2010), Sabater and Meroño (2002) found that organizations that lose a key employee with its competitor, besides seeing a reduction in their competitive advantage, they also lost the value produced by the intangible knowledge of this key employee. Campbell et al. (2012) developed a scheme that showed the importance of the complimentary company assets in value creation, and its relationship with employees' human assets. These authors showed that the significance of this power relationship between the employees' capacities and the companies' capabilities depends on the power that each one of the involved actors has to incline the negotiation moment on its favor.

As a product of their research, Campbell et al. (2012) developed a theoretical model that showed that employee earnings have a negative relationship with employees' mobility intentions, and in case the employee leaves the company he/she has two options: creating a new business or join another company in the same sector. Additionally, these scholars suggested that this decision cannot depend exclusively on received employees´ income, but there should also be other factors, and they suggested that other variable such as human capital would be incorporated in future research and that the research would be carried out in knowledge-intensive industries, such as professional services sector industries.

Boyar, Valk, Maertz, and Sinha (2012) mentioned that several studies have confirmed that the main reasons for employees to leave companies are: "unmet expectations about the job, unchallenging work environment, long working hours, limited career growth, less promotional opportunities, lack of proper leadership, non-attractive compensation packages, and poaching of talent by competitors" (p. 12). In Colombia, this phenomenon according to a study from Asociación Colombiana de Relaciones Industriales y de Personal (ACRI) the

employees´ mobility intentions in companies has increased substantially; this fact is attributed the incorporation of new types of contracts (Ardila, 2014). The problem of employees´ mobility intentions is rooted in its frequency and motives that generate it. Studies carried out in Colombia show that options demonstrating an inefficient management of companies' human resources are the ones that are motivated by personal and labor arguments and that they are reflected in the companies as a worker decision, this could be hiding other reasons. There is also the case of a worker that hides the reason to leave the company with the only purpose of moving as fast as possible, and not losing the newfound job (Ardila, 2014). Frank and Bernanke (2007) explained this particular situation as an opportunity cost of the employee, in these words "the value of the next-best alternative that must be forgone to undertake the activity," cited by Polley (2015, p. 11).

The Observatory of the Labor Market and Social Security (Universidad Externado de Colombia, 2006) showed that education was the primary activity of professionals in Colombia with 27.4%, followed by real estate with only 13.5%. The sectors which make intensive use of college work were as expected, research and development (a subsector of real estate activity, 67.3%), education 64.5% and international organizations 62.5%. Currently, the labor market of the Colombian professionals seems characterized by high demand and higher growth of supply, relative and absolute, which tends to compress wages and taxes. Additionally, a study by Universidad Externado de Colombia (2001) showed that hourly earnings in the formal sector are significant differences between private employees (2,634), public employees (4,049), the self-employed (4,170), and employers (5,626); the difference in years of schooling was 10.9, 13.3, 14.2, and 14.8 respectively; while ages were from 34, 38, 39.4, and 46.9 respectively. This situation has generated in Colombian employees desire to be linked to the public sector or start their own business. When this happens, and very often, the decision to be associated with one or other sector it is also

permeated by the perceived opportunity cost. In connection with higher education sector, the higher education statistics reported by the Ministerio de Educación de Colombia (MEN, 2014) in the National Information System of Higher Education [Sistema Nacional de Información de la Educación Superior] reported that the percentage of professors dedicated to teaching, according to the time spent on this activity was: full time 30.67% equivalent to 35,828 professors; part-time 14.40% equal to 16,819 professors; and hour rate professors 54.93% equal to 64,172 professors, for a total of 116,819 professors (MEN, 2014). According to the level of education obtained by the University professors at the end of 2013, the highest formation level reached by these professors is distributed as follows: Ph.D. 5.83% equivalent to 6,803 professors; master degree 23.89% equal to 27,908 professors; specialization degree 31.56% equal to 36,867 professors; and University Degree 38.73% equal to 45,241 professors (MEN, 2014). In brief, about 70% of University professors in Colombia do not have a high level in advanced studies, such as master and Ph.D., and only 30.67% of professors have full-time contract.

According to the MEN (2016) in Colombia there are 82 higher education institutions with the rank of University (Ley 30, 1992). 74 of the 82 universities offer the business administration program, and 33 of these universities have high-quality accreditation. 73% is concentrated in just 5 of the 32 departments that have Colombia, distributed as follows: 26% in Bogotá, 20% in Antioquia, 12% in the Valley, 9% in Bolivar, and 6% in the Atlantic.

Related to these 74 public and private universities offering in Colombia the business administration program, the total number of professors of business administration, with full-time contract, and magister degree or Ph.D. are 2,739 (MEN, 2016). The number of undergraduate programs in business administration, economics and accounting with accreditation in force at June 30, 2014 was 138; and the number of the graduate level was 4. By department, Bogotá had to June 2014, 33.3% of undergraduate programs accredited force,

followed by 21.1% Antioquia, Valle 8.9%, 5.3% Santander, Atlantic 5%, 4.2% Caldas, Bolivar 3.9%, 3.4% Boyacá, Risaralda 3.2%, 1.9% Tolima, Cundinamarca 1.8%, 1.6% Nariño, Huila 1.2%. The first five departments accounted for 73.6% of all universities with undergraduate programs in business administration accredited by the MEN, and the top ten universities represent 90.2% of all programs offered in Colombia. 48% of undergraduate programs belong to public universities and 52% at private universities. Finally, the 54 accredited graduate programs in force are distributed in the departments of Colombia as follows: 25 in Bogota, D.C., 24 in Antioquia, 3 in Risaralda, and 2 in Valle del Cauca (MEN, 2014).

The following information provided by the Red de Indicadores de Ciencia y Tecnología Iberoamericana e Interamericana (RICYT) (2011) [Network on Science and Technology and Inter Iberoamericana]. By 2011, spending on research and development by funding sector are distributed as follows: government (51.92%), public and private companies (30.76%), higher education (9.68%), NGO's (4.79%) and abroad (2.82%); while spending on R&D by funding sector is distributed as government (41.85%), public and private companies (30.85%), higher education (16.98%), NGO's (6.54%) and abroad (3.76 %). Now researchers by sector of employment are distributed as follows: government (1.02%), public and private companies (0.66%), higher education (90.29%) and NGO's (8.01%). And researchers by the level of education are distributed as follows: Ph.D. (28.63%), MSc (45.46%), BSc (25.30%), and others (0.59%) (RICYT, 2011). These data showed that a significant percentage of researchers (90.29%) remain in the academy because they do not find other workspaces neither in business nor government; there is a large gap between academic training and the needs of the organizations. Also remains small business investment in R&D (30.76%), which employs only (0.66%) of researchers; while a large percentage of this investment is in government hands (51.92%), and only employs (1.02%) of

researchers. Unlike countries such as Israel and India where the Academy is linked to the business world and creates products and services, Colombia is far from these achievements (Oppenheimer, 2012).

Another study made by Centro de Educación Superior Internacional de Boston College, USA [Boston College International Higher Education Center] and published by the Colombia´s leading newspaper entitled "Colombia, un país que paga bajos sueldos a sus profesores" [Colombia, a country which pays professors low wages] El Tiempo (2012) showed the comparative results of wages and working conditions of University professors in 28 countries; this study found that Colombia is in the 10th place among nations with lower salary for professors. The average salary for a professor who works full time in Colombia was USD$ 2,702 for purchasing power parity, in Mexico was USD$ 1,941, in Brazil, was USD$ 3,179, and in Argentina was USD$ 3,755; but the problem is that these kinds of salaries in Colombia only exist for a tiny group of full-time faculty with a stable contract. It is very common that academics are looking for opportunities to improve their income (El Tiempo, 2012).

Problem Statement

Because employee mobility generates serious problems for companies the management of universities in developing countries, given the wage conditions and context, it is necessary to understand the variables that explain the decision of professors to stay or to leave the University. Indeed, this study wants to show that the ruling of the University professor related to staying or to leave the University he/she works for is affected by his/her perception of the rewards that he/she receives, both extrinsic as intrinsic. Also, his/her opinion related to the value that University gives the human capital formed by professors; and that the opportunity cost of the professor moderates both relationships: extrinsic rewards and employees´ mobility intentions, and intrinsic rewards and employees´ mobility intentions.

Additionally, conditioned on mobility, the professor who perceives that he/she has high extrinsic and intrinsic rewards, and considers that the University values the human capital is more likely to create new venture than join to another organization.

Purpose of the Study

The purpose of this quantitative study was to test empirically a theoretical model which variables explain the decision-making of high-performing employees in the sector of higher education, regarding their intention to stay or leave the organization for which they work, considering organizational and individual aspects, and taking into account a moderator variable.

The study contributes to the generation of knowledge about what factors that operationalize the constructs proposed in the model to evaluate, allow to identify the opportunity cost of the professor in connection with his/her decision to stay or to leave the University. It also allows, indirectly, from an institutional point of view how to reach better results in human capital management, with the objective to retain and support the development of the best talent in the professional services sector companies that use knowledge intensively, specifically in the field of higher education.

According to Saunders, Lewis, and Thornhill (2012), the type of contribution in this study is framing in "substantive theories." It is restricted to a particular time no greater than a year, to a "research setting," and to a group of professors that work in the professional sector of higher education.

Significance of the Problem

Some significant studies have reported different causes behind the employees' mobility intentions in all industries. Some researchers as Kalkauskaite, Buciuniene, and Turauskas (2006) stated that when management of the human resource is adequate, it generates a higher affective commitment in employees, and it is more probable that they

voluntarily contribute to the organization performance reducing employees´ mobility intentions. According to the literature, there are many predictors of the resignation of employees to their jobs probably associated with the opportunity cost of the employee. This opportunity cost is the best alternative that a person gives to its factors (Frank & Bernanke, 2013); and that was one of the objectives of this study. Some of these predictors, objects or this study were extrinsic rewards (Campbell et al., 2012; Juma & Lee, 2012; Newman & Sheikh, 2012); intrinsic rewards (Juma & Lee, 2012; Newman & Sheikh, 2012); and human capital (Martín, 2011).

According to Martín (2011) employees who handle and have a highly valuable knowledge and skills are recognized as an important resource in organizations, because they are difficult to imitate and replace (Barney & Wright, 1998; Barney, 1991, 1995; Lado & Wilson, 1994). What makes them the right strategic human capital that any organization should seek to develop and retain (Boxall, 1996; Lepak & Snell, 1999), and in turn could assist in resolving the problem of employees´ mobility intentions (Malhotra, Budhwar, & Prowse, 2007). Additionally, the literature reviewed for this study suggested that not only extrinsic rewards, intrinsic rewards, and human capital, as predictors of employees´ mobility intentions, but also incorporates the moderator variable opportunity cost of the employee. Because the opportunity cost cause greater changes in preferences and decisions made in the absence of opportunity cost has received little attention in the literature (Greenberg & Spiller, 2015). In this sense, this study helps to comprehend: (a) if the perception that professors have the received rewards, as well as the support that the organization gives the human capital influences their decision to leave the University; (b) to what extent the moderating variable, the opportunity cost of the employee affects the relationship between employees´ mobility intentions and their predictors, extrinsic rewards and intrinsic rewards; and (c) if professors

who prefer to create new venture are those who expressed having received better rewards and better organizational support for human capital.

The knowledge acquired will help to understand, from the opportunity cost of the employee, the decisions he/she could get to take on staying or to leave the organization, “the value of the opportunities lost” (Cowen & Tabarrok, 2010; cited by Polley, 2015, p.11). Also, increase comprehension level of human capital management effectiveness in the companies. The model exhibits its significant predictive power according to the opportunity cost of the professor variation, which is the moderating variable.

Indirectly this research allows managers: (a) to recognize the variables associated with the opportunity cost of the employee; (b) to identify factors related to internal rewards and external rewards that are most valued by academics; (c) to determine factors related to human capital that are most appreciated by scholars; (d) to determine if there are common elements related to the phenomenon of intention to quit and the opportunity cost of the employee; (e) to identify potential risks that managers can fall into if an employee with a better professional level decides to leave the organization; and (f) to develop strategies that permit to minimize loss of valuable human capital in the future.

Nature of the Study

This research is quantitative because the idea comes from quantitative studies made by researchers, such as Campbell et al. (2012) who developed a theoretical model that correlates the employee’s earnings with employee´s mobility intentions. They suggested that the decision to withdraw from a company could not be explained sufficiently by the income received by the individual, so it was necessary to incorporate another variable in the model that takes into account human capital in the company. Juma and Lee (2012) who set out to investigate the kind of incentives that employers could use to increase employee retention and affective commitment, with particular emphasis on extrinsic and intrinsic rewards.

Newman and Sheikh (2012) who set out to examine the relationship between organizational rewards and employee turnover. Yip (2014) who suggested developing a further research with some peculiarly designed reward calculation systems compatible with the opportunity cost concept; and Greenberg and Spiller (2015) who proposed that includes the opportunity cost in decision-making in future studies. In this regard, this study tries to correlate the following variables that influence employees´ mobility intentions, such as external rewards [it includes among others employee´s earnings], internal rewards, and human capital. Also the moderating effect of the opportunity cost of the employee on the relationship between rewards and intention to leave the organization. As stated, the nature and correlation of these variables with employees' mobility intentions, is also based on quantitative studies.

This study considers the contribution of three disciplines: economy, sociology, and psychology. Concerning the economy holds that education, and employees' knowledge and abilities constitute a substantial cumulative capital for the company, which is performance imperative to preserve in the long term (Strober, 1990), because it improves the company and reduces the costs generated by employee mobility, such as, "recruitment, selection and training expenses" (Park & Shaw, 2013, p. 269). Regarding sociology holds that employees join companies in exchange for rewards, and therefore the way the company administers its individual talent management policy strengthens or reduces the employee intention to stay or leave the company (Blau, 1964). And, concerning psychology holds that employees' perceptions and attitudes about working conditions are the behavioral outcomes that lead to the intention to leave the company (Wright & Cropanzano, 1998). The variables proposed in this study and the elements that operationalize them, include the elements described above.

This study is based on the findings of some academics such as (a) Campbell et al. (2012) who proposed a theoretical model that showed that employees with higher income are less likely to leave the company, and when this happens, they create a new company in

exchange for linking to another company; (b) Juma and Lee (2012) who proposed that future research should address the type of incentives employers may use to increase employee retention and affective commitment; it is interesting to note that they found that job mobility between companies was mostly horizontal level, but with higher salaries and more lucrative fringe benefits; Juma and Lee (2012) also considered that while others researchers argued that the poaching of top talent in the banking industry is so competitive that most executives negotiate upward mobility and greater autonomy or more flexible contracts; they believe that both intrinsic factors (such as autonomy, responsibility, achievement, and challenging work assignment) and extrinsic rewards (such as salary, fringe benefits, career advancement, and organization status) are necessary for employee retention and commitment, in order to reduce turnover intention. In relation to both mentioned findings this situation really expresses an opportunity cost, because according to Voiculescu (2009) "one should take into account the fact that the cost of determining whether there really is a choice makes sense only if the choice is possible" (p. 747); in this sense the relationship between extrinsic and intrinsic rewards on employees´ mobility intentions expressed in hypotheses reflect the opportunity cost of employee, because it shows that he/she prefers to stay with the company, to the extent that he/she feels well paid and/or recognized; Juma and Lee (2012) also anticipated that cultural values of individual employees may predispose them to either intrinsic or extrinsic rewards; and they found that professionals at various stages of their careers had work-related attitudes and contextual perceptions tended to change over time with significant organizational experience; and suggested that future studies may check for inter-group differences; (c) Newman and Sheikh (2012) focused their research on the relationship between organizational rewards and affective commitment, and proposed to extend their research by examining the relationship between organizational rewards, and more objective, such as employee turnover; in addition Benjamin (2012) found that 88% of employees leave

for reasons other than money, and suggested issues, such as, lack of career growth and advancement opportunities, paid under-market or less than contributions warrant, lack of recognition, poor investing in employees, lack of training, lack of tools and resources, and lack of teamwork among others; (d) Martín (2011) and Campbell et al. (2012) who acknowledged the importance to include, in future studies, population with high levels of knowledge, skills, education and experience, in order to explore the human capital, and take into account the role of professional specialties in mobility decisions; (e) Yip (2014) who recommended to carry out a research that incorporate rewards systems compatible with the opportunity cost concept; and (f) Greenberg and Spiller (2015) who recognized the importance of including the opportunity cost in decision-making because it affects preferences.

The literature review showed that employee mobility is a more complex phenomenon that requires for its understanding takes into account: (a) the disciplines of psychology, sociology, and economics; (b) the effect generated by the interaction of the predictors of employees´ mobility intentions; and (c) incorporating the effect of a moderating variable in the relationship between the predictor variables and employees´ mobility intentions. In consequence, this study proposes empirically test a theoretical model that explains employees' mobility intentions in the professional field of University education and incorporates the recommendations of the previous studies reviewed.

According to Gray (2009), this study followed the philosophical ontology of the whole being because it permanently emphasizes that reality does not change, and therefore it is composed of entities properties clearly identifiable that represented by symbols, words, and concepts. Also, followed the positive philosophical epistemology because it arguments that the world exists out of the researcher, and observation measures their properties, reality is available to senses, and the scientist base on scientific observation; thus, it collects data about

the observed reality, and the emphasis is on quantifiable observations that permit statistical analysis. It is a descriptive and explanatory study because the research focuses on studying the relationships between the three independent variables extrinsic rewards, intrinsic rewards, and human capital on the dependent variable employees´ mobility intentions; as well as, the impact of the moderator variable opportunity cost of the employee, in the relationship between extrinsic rewards and intrinsic rewards on employees' mobility intentions. Because it captures the perceptions of the professors about the variables involved in the model, the study also predicts their behavior on the endogenous variable employees´ mobility intentions. But nevertheless, it is not explanatory in nature because it does not focus on explaining why the phenomenon of intention to withdraw from the University occurs, or under what conditions this event occurs, or why two or more constructs are related. (d) It followed a hypothetical-deductive logic because theory and data are available to solve the research questions, and followed the survey methodology because tries to test a theory studying the association of the involved variables in the field. The data collection method was a questionnaire. The result of the study was applied because empirically test a theoretical model that explains employees' mobility intentions. The sample was stratified and convenience, because it selected a particular group of employees that work as professors of business administration in public and private universities. The time of the study was cross-sectional and had a duration of one year.

The study used a valid research tool. Specifically, a questionnaire was applied to professors from Faculties of business administration in public and private Universities in Colombia, professors with graduate degree master's or Ph.D., and full-time contract with a University. According to Chin (1998a), Lohmöller (1989), and Tenenhaus, Esposito, Chatelin and Lauro (2005) the model was tested by the technique of partial least squares path modeling *(PLS-PM)* and used the opportunity cost of the employee as a moderating variable.

PLS-PM orients the scope of social and econometric sciences. About *PLS-PM*, Esposito, Chin, Henseler and Wang (2010) said it is a "statistical approach for modeling complex multivariable relationships among observed and latent variables" (p. 2).

Research Questions

What extent variables like extrinsic rewards, intrinsic rewards, and human capital influence an employees´ intentions to stay or to leave the company he/she works for? Is there a difference in the decision-making of professor to stay or to leave the University for he/she works for, influenced by the moderating variable opportunity cost of the employee, taking into account his/her perceptions related to the extrinsic rewards and the intrinsic rewards that he/she receives? What types of professors are most likely to leave?

Research Objectives

This research aims to achieve the following objectives. To identify whether professors´ perceptions about extrinsic rewards, intrinsic rewards and human capital affect their decision to stay or to leave the University. To identify if the variable opportunity cost of the professor moderates both relationship between extrinsic rewards and employees´ mobility intentions, as well as intrinsic rewards and employees´ mobility intentions. To identify whether professors choose to create new venture are those who earn the highest rewards and the best organizational support for human capital. To compare the outcomes of the first two objectives. To know whether the model can explain the phenomenon employees´ mobility intentions.

Hypotheses

As a result of a revision of literature, this study develops the following theoretical proposal that contains the specific research hypotheses; these hypotheses are measurable proposals about the relationship between variables.

Hypothesis 1: If the professor perceives has better extrinsic rewards, he/she is less likely to withdraw from the University.

Hypothesis 2: If the professor perceives has better intrinsic rewards, he/she is less likely to leave the University.

Hypothesis 3: If the professor perceives his/her University values human capital, he/she is less likely to withdraw from the University.

Hypothesis 4: Perceptions of opportunity cost of the professor moderate the effects between perceptions of extrinsic rewards and the likelihood of choosing to leave from the organization.

Hypothesis 5: Perceptions of opportunity cost of the professor moderate the effects between perceptions of intrinsic rewards and the likelihood of choosing to leave from the organization.

Hypothesis 6: Conditional on employees´ mobility intentions, professors with higher levels of extrinsic and intrinsic rewards, and professors who perceives that the University values human capital are more likely to create new venture than join to another organization.

Theoretical Framework

This study on employees' mobility intentions is part of the academic field of human resources because it addresses employees' mobility in professional services sector with intensive use of knowledge. According to Cotton and Tuttle (1986), there are "few areas within industrial/organizational psychology have received as much attention as employee turnover" (p. 55). Since the beginning of the last century hundreds of qualitative and quantitative studies have been conducted, and these have contributed to the understanding of this phenomenon (Cotton & Tuttle, 1986). Barak et al. (2001) reported that employees' mobility intentions are mainly related to three disciplines: psychology, sociology, and economics. Additionally, they suggested that to get a better explanation of this phenomenon

it is essential that research undertaken in this regard, take into account these disciplines and theoretical framework supporting it. Consequently, and in line with the proposed research questions, this study proposes and empirically test a model from a previous theoretical model developed by Campbell et al. (2012); and supplemented by studies by Juma and Lee (2012), Newman and Sheikh (2012), Martín (2011), Yip (2014), and Greenberg and Spiller (2015). The model proposed in this study helps to understand three specific relationships, first, if the perception that the professor has about extrinsic rewards, intrinsic rewards and perceived support for human capital affecting his/her decision to stay or to leave the University. Second, if the perception that the professor has about extrinsic rewards and intrinsic rewards changing his/her decision to stay or to leave the University, due to the effect of the moderating variable opportunity cost of the professor. Third, if the professor expressed the intention to leave the University, what kind of decision he/she would take: to create a new venture or join to another organization.

This study involved at least three disciplines of knowledge: economy, sociology, and psychology.

From the standpoint of economy, this subject suggested elements such as the educational level that increase people's skills as well as productivity and benefits, employee's knowledge and expertise, firm performance, and reduction of costs generated by employees´ mobility intentions. In this sense, Park and Shaw (2013) suggested the type of industry leverage; thus, companies that invest: (a) in human capital development (Yi-Ching, Shui, & Sun, 2012); (b) in specific training activities (Coff, 2002; Hambrick & Mason, 1984; Ismail, Mohd & Hair, 2011); and (c) offer promotion opportunities (Williamson, Burnet & Bartol, 2009); maximize profits and reduce employees' intention to leave the company (Campbell et al., 2012). This type of investment made by the firm, and their impact on employees is directly related to the decisions of the latter, either to stay in the company or to withdraw

from it. Therefore it is directly linked to the concept of opportunity cost because this concept is necessarily related to the process of choice (Robbins, 1934; Voiculescu, 2009). It is a condition for the existence of the opportunity cost that there are at least two courses of action, so that the decision-maker, in this case, the employee can select either course of action as his/her choice (Yip, 2014). Regarding sociology considered organizational rewards because it strengthens adherence to the company, especially in high-performance employees (Griffeth et al., 2000). When the firm is interested in meeting employees' needs and expectations, they show more commitment and prefer to stay with the company (Haar & Spell, 2004; Newman & Sheikh, 2012). From this point of view, the employee also is facing two possible decisions, in this case, he/she is influenced by organizational rewards he/she receives. Here the opportunity cost of the employee, among others, it is also evident that the opportunity costs are primarily decision costs, future-oriented, and linked to expectations of the decision-maker, the employee, has about future events (Yip, 2014). Regarding psychology considered that employee's perceptions and attitudes about working conditions lead to behavioral outcomes, such as the intention to leave the company, development of counterproductive work behavior and job performance (Wright & Cropanzano, 1998). From this point of view, also it operates the opportunity cost of the employee because he/she will make a decision according to his/her expectations. "Whether his expectation actually turns out into reality is not important, because the decision maker has already made his decision and complete the process of decision making" (Yip, 2014, p. 12). Thus, the decision is always affected by expectation rather than fact, although the decision- maker may wish that the expected outcomes of his/her selected course of choice will subsequently turn into reality (Thirlby, 1946, cited by Yip, 2014, p. 12).

Recent studies helped identify research needs in these variables related to employees' mobility intentions: employees' earnings (Campbell et al., 2012), organizational rewards

(Juma & Lee, 2012; Newman & Sheikh, 2012); human capital (Martín, 2011); and the opportunity cost of the employee (Greenberg & Spiller, 2015; Yip, 2014).

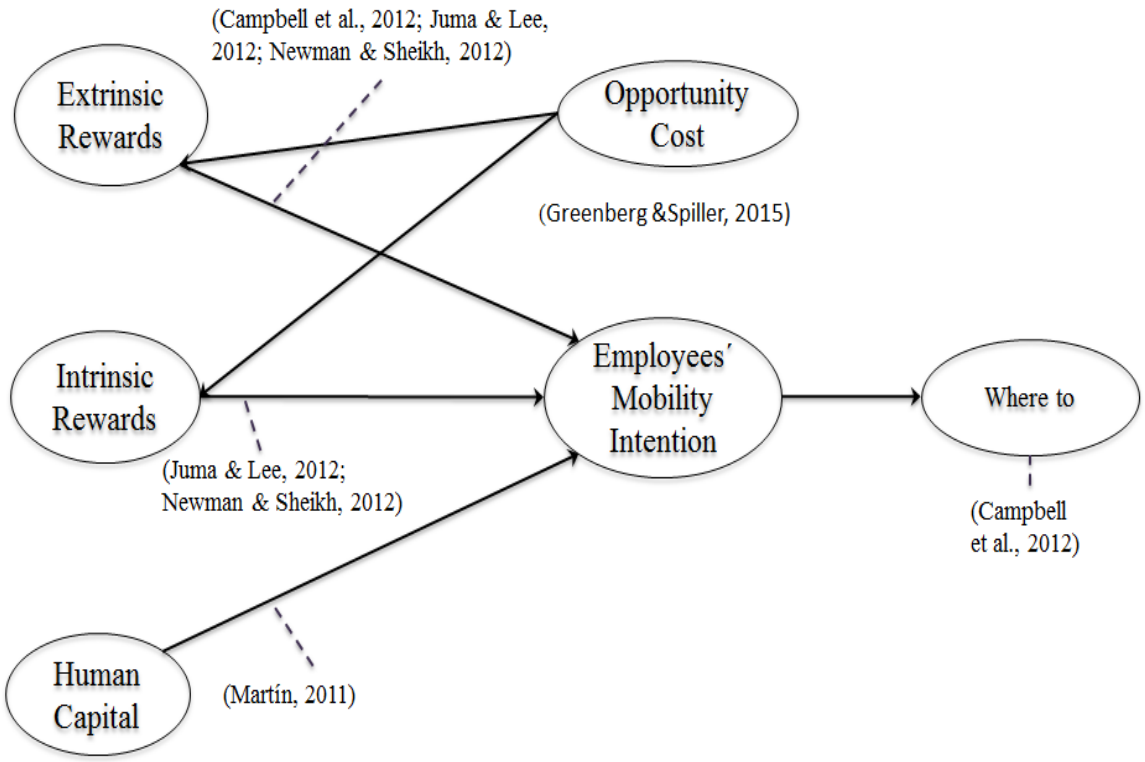
There are in the explicit literature recommendations of research meta-analysis related to employees' mobility. These recommendations are to incorporate moderating variables not only identify causal relationships between the independent variables and the dependent variable (Cotton & Tuttle, 1986; Griffeth et al., 2000); in this regard, the moderator variable is the opportunity cost of the employee (Greenberg & Spiller, 2015; Yip, 2014). Also, the importance of taking into account the interrelation effect among the strongest predicting variables of employee's mobility intentions, and also the importance of including the disciplines that better explain the phenomenon of employees' mobility, such as psychology, sociology, and economics (Barak et al., 2001). Accordingly, this study proposes an empirically prove a theoretical model that integrates identified research needs and explicit recommendations made in previous studies.

The following are the variables of the proposed model, presented in Figure 1.

1. Independent variables. Literature reviewed showed a negative correlation between the following variables and employees´ mobility intentions, these variables are: extrinsic rewards, intrinsic rewards and human capital. They are the independent variables of the model.
2. Dependent variables. The employees´ mobility intentions and the destination to which the professor expresses his/her intentions to address are the dependent variables of this study.
3. Moderating variables. The moderating variable of the proposed model is the opportunity cost of the employee.
4. Control variables. The control variables are organization status [public or private, and accredited or non-accredited], position within the University,

tenure, work experience [years of teaching experience], number of articles published in professional journals in the last year, age, gender, marital status, level of education, salary and type of contract.

It is important to note that Figure 1 only shows the relationships among the six constructs involved in the proposed model. Three constructs are exogenous: extrinsic rewards, intrinsic rewards, and human capital. A construct is a moderator: opportunity cost. Two constructs are endogenous: employees' mobility intentions and where to. In this figure the dimensions that make up the constructs are not present, they are shown in Figure 3, with the results of the statistical technique PLS. PLS statistical technique only allows relationships between constructs, and arrows in the model cannot be a construct to an arrow connecting two constructs.



Control Variables: gender, position (Chen & Aryee, 2007); marital status (Ismail et al., 2011); work experience, (Choi et al., 202); organization status (Consejo Nacional de Acreditación, 2006; Juma & Lee, 2012); age, organizational tenure (Choi et al., 2012; Yi-Ching et al., 2012); higher education level (Yi-Ching et al., 2012); number of articles published in profesional jounals (Universidad Nacional de Colombia, 1996); salary (Campbell et al., 2012); and type of contract (Decreto-Ley 2663, 1950; Gilder et al., 2003; Khan et al., 2012)

Figure 1: Framework. Prepared.

Definition of Terms

Some terms used in this study.

1. *Complementary assets*. According to Campbell et al. (2012) the complementary assets have three parts: “organizational knowledge (e.g., codified routines, knowledge embodied in products and processes, and intellectual property rights), nonhuman complementary assets (e.g., physical capital, contractual relationships with buyers/suppliers, brand equity, and reputation), and human complementary assets (e.g., tacit knowledge embodied in other employees)” (p. 67).
2. *Human assets*. “Human assets refer to special skills, knowledge, or personal relationships that are only applicable to a given firm" (Coff, 1997, p. 377).
3. *Human capital*. Initially literature spoke without distinction both human capital and intellectual capital and referred to knowledge, skills and abilities (KSAs) incorporated in people (Bart, 2001; Coff, 2002; Edvinsson & Malone, 1997; Yi-Ching et al., 2012; Youndt & Snell, 2004), in this sense, KSAs also include experiences, education, and training managers. Subsequently, according to Martín (2011) the concept of human capital evolved, and if considered as a capacity of the organization, which allowed extracting the best solutions through knowledge of employees; then the human capital consisted of the sum of tacit and explicit knowledge (Bontis, 1998; Bontis, 2001; Bueno, 2002; Ordóñez de Pablos, 2003), which gave space to the social capital. Finally, Gratton and Ghoshal (2003) added a third dimension called affective capital and extended the conceptualization of human capital to three dimensions, namely: intellectual capital, social capital and emotional capital (Martín, 2011). These three dimensions should not be confused with the intellectual capital, structural capital, and social capital at the organizational level (Youndt & Snell, 2004).

4. *Human capital management*. In recent times human capital management has become very important (Mehta, 2011). Ward (2009) defined human capital management as the following:

The 1st Generation of Human Capital Management (HCM) addressed business needs through the system integration of recruiting, learning, performance, and succession… The 2nd Generation of HCM will address the need of content and services… The content in a human capital management solution includes items such as: (a) courseware, testing instruments, evaluations, and coaching tips (LMS–Learning Management System); (b) interview guides, screening instruments, job profiles, and market salary bands (ATS–Applicant Tracking System); (c) assessment instruments, writing assistants, mentor guides, and goal templates (PMS–Performance Management System); y (d) proficiency profiles and career paths (SP – Succession Planning); as well as competency models, climate surveys, and job descriptions (Ward, 2009, pp. 212-214).

5. *Opportunity cost*. The definition of opportunity costs has three several issues. First, this concept is necessarily related to the process of choice (Robbins, 1934); it implies that there are at least two alternatives and that the individual could take for himself the decision of the course of action that he/she will. Then, the value of the rejected option is the amount he/she sacrificed, and his/her opportunity cost (Yip, 2014). Second, it is important to consider non-monetary factors in the decision (Coase, 1938), because there is a close relationship between the opportunity cost and the subjective value judgment made by the decision-maker, which makes this decision tough to communicate to others (Buchanan, 1973). Third, the concept of the opportunity cost refers mainly to costs of future-oriented decisions and therefore relates to the expectation that the decision-maker has

about what will happen in the future (Yip, 2014). Thus the opportunity cost is a situational concept interpreted in different ways under different circumstances (Yip, 2014). However, this research, as Greenberg and Spiller (2015) places particular emphasis on the neglected opportunity cost, because all choices involve forgone alternatives and the opportunity cost also alters people´s preferences for options. Consequently, some factors affect the consideration of opportunity cost, and moderating the effect of choices on preferences, and therefore will cause greater changes in preferences, this means that the opportunity cost is implicit.

Related to higher education the opportunity cost reflects differences between the marketability of professors with various subject area specialties. Professors "with different academic specialties have specific skills and knowledge that contribute to their marketability in public education as well as in business, industry, and government" (Beaudin, 1993, p. 56).

Assumptions

The perception of the participants in the study of the variables affecting the employees' mobility intentions is a valid source of information. But nevertheless, they, according to their high education level can answer all the questions in the questionnaire.

Campbell et al. (2012) showed that there is a negative correlation between employees' mobility and the firm performance. Therefore, it is assumed that it is not necessary to demonstrate this correlation in this study; also, it is assumed that the target population to develop this study included specialized employees, namely University professors with different levels of education.

According to Barak et al. (2001), it´s assumed that predicting variables of employee's mobility intentions are interdependent; therefore, although they influence such mobility to a different extent, they act simultaneously at the time the employee has the intention to leave

the company; also it´s assumed that for a better explanation of employees´ mobility intentions, it was necessary to consider the contributions of psychology, sociology, and economics.

According to statistics from MEN (2014) which rank University professors by the level of education (e.g. University degree, specialization, master's, Ph.D.), it is assumed that University professors with master's degree and Ph.D. were considered high performing workers (Campbell et al., 2012).

According to Crook, Combs, Todd, and Woehr (2011), it is assumed that the time of this research was cross-sectional because they demonstrated that the effect of human capital on performance does not depend on a long-term temporal component to capture it. Therefore, it is assumed that this study does not try to analyze the relation human capital and performance of the company, because the unit of analysis is the individual, and the focus is on identifying the employee's perception as a recipient of training, experience, and education from the company.

According to Cotton and Tuttle (1986) and Griffeth et al. (2000) it is assumed that studies conducted on employee's mobility intentions required at least one moderating variable. This moderator measures the effects of predicting variables on the dependent variable; also identifying causality relationships is considered enough for this study, the explanation of causality is not the scope of this study.

According to Williamson et al. (2009), it is assumed that employees' earnings were part of extrinsic rewards because part of it.

According to Choi et al. (2012), it was assumed that social rewards and dimensions associated with them were not taken into account, because this kind of rewards is not significant for professors, due the academic nature of the faculty in a University.

According to Voiculescu (2009) it was assumed that opportunity cost involves both economic costs (e.g. goods, money) and psychological costs (experiences in terms of satisfaction or dissatisfaction). That implies that the employee makes decisions considering "the nature of motivation, aspirations, interests and choices" (p. 745). Therefore, since "a person often makes decisions that are not economically optimal in order that he achieves some other purposes that are not economic in nature" (Drucker, 1990; cited by Yip, 2014, p. 20), it is assumed that the operationalization of the proposed constructs and dimensions in this study gives the respondent, the option of taking economic and non-economic decisions, which show, according to the choice made, his/her opportunity cost.

Scope and Limitations

Regarding the scope of the study, it is important to note that this study focused on University education sector. The population is made up of business administration professors, full-time contract, and magister degree or Ph.D., linked through their work with public and private universities in Colombia, at different stages of their working lives (Juma & Lee, 2012). Literature review permitted to identify that: (a) extrinsic rewards, intrinsic rewards, and human capital are negatively correlated with employees´ mobility intentions; (b) human capital is positively correlated with extrinsic rewards and intrinsic rewards; and (c) it is important to incorporate moderators in studies about employee mobility. In this sense, the literature reviewed suggested the opportunity cost of the employee as a moderating variable.

This study has the following limitations: the honesty of the responses of the survey participants; the time horizon for the study; the reliability of the instruments used; the data obtained in the questionnaire will be subjective, because they represent the views of the respondents; and the results of previous studies that have shown that attitudes related to work and perceptions in a specific situation tend to change over time, according to a significant organizational experience (Kammeyer-Mueller, Wanberg, Glomb, & Ahlburg, 2005).

Regarding the limitations two questions arise: first, are there special conditions to be considered in the size of the sample to draw valid conclusions in this particular professional education services sector, or not?; second, is it possible to go beyond the specific focus and raise valid generalizations for University professors in Colombia? Regarding the first question, there are official records about the exact number of University professors in Colombian population, their different formation levels, their type of contract, and universities offering programs in business administration MEN (2014). The decision to be made on the chosen sample is subject to the statistical technique used, partial least squares (PLS) explained in the third chapter. Regarding the second question related to ensuring that the sample is representative of the population, it is possible to make valid, generalizations, not only because the Working Substantive Code and by rulings from the Constitutional Court regulate the teaching profession in Colombia, but also because it is very well delineated population, and valid and verifiable information was obtained, from the Ministry of Education (MEN, 2016). Additionally, the Constitutional Court of Colombia about University autonomy (Sentencia de la Corte Constitucional de Colombia No. C-517, 1999) said that autonomy is not absolute, and it developed in harmony with the constitutional principles of equity, justice, equal opportunity, recognition of differences and respect for the dignity of those involved in the educational process.

Delimitations

The following aspects delimited this study; the sample corresponds to professors of business administration who work as faculty in public or private universities from different cities in Colombia, an educational level equivalent to masters, and Ph.D., and only full-time professors because they belong to teaching profession. Additionally, according to MEN (2016) there are 31 public universities and 50 private universities, and 1 University with

special regimen. The other 187 higher education institutions in the country are distributed in technology schools, technology institutions, and technique institutions.

Related to public and private universities in Colombia, 48% of undergraduate programs belong to public, and 52% belong to private. The student enrollment in 2015 for undergraduate programs was as follows: 62.4% in Universities, 27.2% in technology, and 4.1% in professional technique. The remaining tuition 6.3%, corresponding to graduate students, such as 3.8% for specializations, 2.3% for masters, and 0.2% for doctoral students. Enrollment by Sector for 2015 was distributed as follows: 50.9% public and 49.1% private (MEN, 2016). It is important to note that the average dollar value of tuition for first year students with cutting December 2015 corresponds to the USD $ 167 in public universities, compared to USD $ 1,385.42 in private universities, which equates to a ratio of 8:1 in the semi-annual value of tuition. The above percentages indicate that in Colombia both public and private University have a large role in higher education of young people. This is the main reason why this research is delimited to public and private universities.

Summary

The purpose of this quantitative study was to test empirically a theoretical model which predicts the decision-making of high-performing employees in the sector of higher education, regarding their intention to stay or leave the company for which they work. Taking into account the analysis of the relationships between independent variables: external rewards, internal rewards, and human capital on the dependent variable: employees´ mobility intentions. As well as the opportunity cost of the employee, that moderates both relationships between extrinsic rewards and intrinsic rewards on employees´ mobility intentions. Finally, predicts whether employees who expressed both intend to leave the University as creating a company have high rewards and also a good perception of organizational support for human

capital. This thesis used as study subjects professors of business administration who work at public and private universities in Colombia, they answered a questionnaire.

The originality of this research resides in the ability to: (a) identify for the first time the relationship between extrinsic rewards, intrinsic rewards and human capital on employees´ mobility intention, in the field of higher education level in Latin America; (b) identify for the first time the effect of the moderating variable opportunity cost of the employee in the relationship between external rewards and internal rewards on employees´ mobility intentions; (c) identify for the first time, whether the decision to leave the University associated with the creation of new venture, corresponds with professors with better perceptions about the rewards they receive, as well as the perceived organizational support for human capital.

Additionally, this research will allow managers: (a) to recognize the variables associated with the opportunity cost of professor; (b) to identify factors related to extrinsic rewards, intrinsic rewards and human capital that are most valued by academics; (c) to determine if there are common elements related to the phenomenon of employees´ mobility intentions, and the opportunity cost of the employee; (d) to identify potential risks that managers can fall into if a professor of better professional level decides to leave the company; and (e) to develop strategies that permit to minimize loss of valuable human capital in the future.

In the next chapter there are the supports of the literature review, about employees´ mobility intentions, precisely, the key disciplines and the framework that are more related to questions and research objectives. Also, the predictors of employees´ mobility intentions, the moderator variable, and the control variables, to propose a theoretical model to be tested empirically; and, understanding the opportunity cost concept, used by people to make decisions. Literature reviewed supported all the relationships between different incorporated

variables in the model, and these variables are consistent with future research needs identified in previous studies

Chapter 2: Literature Review

This study proposed a theoretical framework base on the review of existing literature about employees' mobility intentions in the business world. The idea of doing and study about employees' mobility intentions came from labor experience in the Colombian education sector because it is a phenomenon that continually afflicts higher education institutions in the country and that is followed by national education authorities and communication media by a large interest (Ardila, 2014; MEN, 2014).

After identifying the topic of interest, the literature review conducted to find recent research on the employees´ mobility intentions. In this sense, it was found that Campbell et al. (2012) identified about employees' intention to leave the Company, it was related to benefits, and they proposed that these findings were confirmed in other professional services sectors in future research, with intensive use of knowledge. Additionally, Campbell et al. (2012) found out that employees with a better education level have more negotiating power with the employer, and this could affect the intention to leave or to stay in the company. The literature showed that there is a negative relationship between extrinsic rewards and employees´ mobility intentions (Campbell et al., 2012; Subramanian & Shine, 2013); intrinsic rewards and employees´ mobility intentions (Subramanian & Shine, 2013); and human capital and employees´ mobility intentions (Martín, 2011).

Juma and Lee (2012) emphasized the importance of research the type of incentives that employers could use to increase employees´ retention and affective commitment, with particular emphasis on extrinsic and intrinsic rewards because they are necessary to reduce employees´ mobility intentions. They put emphasis on professionals at various stages of their careers, and they found that this kind of experts had work-related attitudes and contextual perceptions tended to change over time with significant organizational experience; for this reasons they suggested that future studies may check for intra-group differences. Therefore,

this study not only, considered professionals who work as University professors, because in this sector with intensive use of knowledge, there are a substantial number of professionals at various stages of their careers, and they have different and better levels of education that in other sectors of the economy; but also, it considered different types of incentives with particular emphasis on extrinsic and intrinsic rewards. It should be noted that the review of the dimensions that make up the construct extrinsic rewards, led to the discovery that employee´s earnings, proposed by Campbell et al. (2012) were incorporated into it (Malhotra et al., 2007). About rewards, these researchers citing Bratton and Gold (1994) said that "rewards refers to all forms of financial return, tangible service, and benefits an employee receives as part of an employment relationship" (Malhotra et al., 2007, p. 2097). For this reason, henceforth it will be understood that when it comes to employee´s earnings, it is part of extrinsic rewards construct. Similarly, it was found that Newman and Sheikh (2012) demonstrated the existence of a strong relationship between organizational rewards and affective commitment, and they suggested that future studies should examine the relationship between organizational rewards, and something more objective, such as employees' intention to leave the Organization. Organizational rewards have three components: extrinsic rewards, intrinsic rewards (Porter & Lawler, 1968), and social rewards (Katz & Van Maanan, 1977).

The literature reviewed also allowed to find that meta-analysis studies recommend that any study related to employees´ mobility intentions, should necessarily incorporate at least a moderating variable (Barak et al., 2001; Cotton and Tuttle, 1986; & Griffeth et al., 2000). Consequently, this study examined in the higher education sector, "who leaves and where to," considering different types of relationships proposed by researchers cited. First, the relationship between external rewards and employees´ mobility intentions (Campbell et al., 2012; Juma & Lee, 2012; Newman & Sheikh, 2012). Second, the relationship between internal rewards and employees´ mobility intentions (Juma & Lee, 2012; Newman & Sheikh,

2012). Third, the relationship between human capital and employees´ mobility intentions (Martín, 2011). Fourth, the moderating effect of the opportunity cost of the employee in the relationship between extrinsic rewards and employees´ mobility intentions; as well as, in the relationship between the intrinsic rewards and employees´ mobility intentions (Greenberg & Spiller, 2015; Yip, 2014). However, it is important to mention that Campbell et al. (2012) noted that there are "differences in motives may be salient to the choice of where employees go" (p. 70). These reasons for leaving the organization, introduce the concept of opportunity cost of the individual, which it is essentially related to the process of choice (Robbins, 1934). All these relationships and simultaneous effect of proposed predictors of employees´ mobility intentions has not been investigated before, and they constitute the contribution of this study to knowledge.

It is noteworthy that revision of literature led to three meta-analyses done about employees' mobility (Barak et al., 2001; Cotton & Tuttle, 1986; and Griffeth et al., 2000). Consequently, results and recommendations of previous research related to employees' mobility intentions are presented in the development of this chapter. Indeed the theoretical model proposed is supported in recommendations submitted in the three meta-analyses mentioned above and in future studies suggested by consulted researchers for each one of the predictive variables about employees' mobility intentions.

Title Searches, Articles, Research Documents, and Journals

Constructing, factors and proposed variables are part of an exhaustive search on databases such as Primo, ProQuest, JStor, Science Direct, Emerald, Scopus, and Sage. Key words used were: employee mobility, employee turnover, turnover intention, worker mobility, human capital, knowledge embodied in human capital, human capital management, employee earnings, organizational rewards, opportunity cost, perceived organizational support, and partial least squares. Relevant information on employees` mobility was filtered

in databases using the key words identified in pairs, to determine relationships and gaps in the literature.

The strategy used to select the best possible information consists on limiting search using criteria such as refereed journals, full text, and recent date. Empirical research was favored in the selection of journals. Articles suggested by the author in previous research about the same topic, underlying theories, literature used by each author, the relationship between variables, research methodology, obtained results and recommendations for future research were revised and found in more relevant refereed articles.

Literature Review

This section presents for each of the constructs studied the underlying theoretical foundation, the gaps found by the academic community in the relationships studied, and recommendations for future research, which are betting on new relationships that have not been investigated by the community-academic.

Theory

According to meta-analysis done by Barak et al. (2001), "the body of theory on which the turnover literature is based is primarily rooted in the disciplines of psychology, sociology, and economics" (p. 628). In this sense, they confirmed that the theoretical aspects of these three disciplines are necessary to explain employees' mobility. Therefore, this study includes that recommendation because employees' mobility intentions could be better explained if all factors affecting it are taking into account, factors such as external, related to work, and employees' personal characteristics (Cotton & Tuttle, 1986). About the psychology, Wright and Cropanzano (1998) stated that both attitudes, labor conditions and employees' perceptions lead to conduct results. About sociology, Blau (1964) indicated that people join a company expecting benefits. And about economics, Strober (1990) reported people's education level is positively correlated with income because education level increases

abilities and this increment productivity is rewarded with more benefits; therefore high education levels and income are correlated positively. “If you want a good job, get a good education" (p. 214); and "the employee´s education and skills are the major source of his or her productivity" (p. 218). There is a virtue circle that refers that highly educated people have more knowledge, abilities, and capacities that improve productivity, increase benefits, strengthen links with the company and develop behavior according to received benefits and this reduces turnover intention. Then employees with high performance focused on rewards. (Griffeth et al., 2000). These elements provide the individual with a framework in which he/she "should take action if, and only if, the extra benefits from taking the action are at least as great as the extra costs" (Frank & Bernanke, 2013, p. 4). “This is the basic rule of decision-making in economics … surplus value is the yardstick for measuring opportunity cost” (Polley, 2015, p. 12).

Employees´ mobility intentions

The revised and related literature with this construct led to the discovery that scholars used interchangeably, several related meanings, such as turnover intention, employee´s intention to withdraw, employee´s intention to quit, employee´s intention to leave an organization, employees' mobility intentions. This concept is frequently “associated with job search behavior; this need not always be the case. As oppose to labor turnover, turnover intentions are not definite” (Sousa-Poza & Henneberger, 2002, p. 1).

Employees´ mobility intentions “reflects the [subjective] probability that an individual will change his/her job within a certain time period” (p. 2), whereas “turnover is the movement of members across the boundary of an organization” (Price, 2001, p. 600). About the relationship between these two concepts, Juma and Lee (2012) suggested that there is a high correlation between turnover intention and actual turnover (p. 2329). Also, Bluedorn (1982) and Price and Mueller (1981) recommended it is preferable to use the employees´

mobility intentions over actual turnover because actual turnover is harder to predict than employees´ mobility intentions, and additionally many external factors can affect a person´s turnover behavior (Subramanian & Shine, 2013).

This construct is related with voluntary turnover, which it is the precursor to the decision to leave the organization. It is important to note that early studies on voluntary turnover dating from the sixties and seventies, these studies sought to identify the reasons why an employee made the decision to leave the organization (April & Simon, 1958; Price, 1977; Mobley, 1982b), negatively affecting employee retention. White (2001) and University of Guelph and Chawla (2005) considered that voluntary turnover and retention of employees are two sides of the same coin. The first phenomenon has been studied from the individual, focusing on the causes; and second, from the organizational perspective, focusing on the actions taken by the organization to retain their most valuable employees. The construct proposed in this study is focused from the standpoint of the individual, and not from an organizational point of view because there are numerous studies analyzing retention/voluntary turnover, to predict, control, identify and designing formulas retention of its employees (Borislavova, 2004; Buck & Watson, 2002; Chew, 2004; Chiu, Luk & Tang, 2002; Griffeth & Hom, 2001, 2004; Hom & Griffeth, 1995; Mathieu & Zajac, 1990; Maertz & Campion, 1998; Mobley, 1982b; Morrell, Loan-Clarke & Wilkinson, 2001; Peterson, 2004; Richman, Civian, Shannon, Jeffrey Hill, & Brennan 2008; Starosta, 2007; Thite, 2010; Williams, 2001; among others). And therefore, the aim of this study is not to join the others, but to understand from the perspective of highly qualified employees their perceptions and intentions, against the possible decision to leave the organization for which their work. Taking into account their bargaining power from working in a sector of knowledge-intensive (Campbell et al., 2012), as well as their experience and high level of education.

According to Nauta, Van Vianen, Van der Heijden, Van Dam, and Willemsen (2009), the big question about employees´ mobility intentions is to know "what determine whether individuals intend to leave their organization, and what determines their motives for leaving?" (p. 236). In this sense, Van Vianen, Feij, Krausz, and Taris (2004) distinguished between two motives for turnover: push and pull. About Push motives, Nauta et al. (2009) considered that they are "related to dissatisfaction with the current work situation, whereas pull motives refer to available opportunities to improve one's career opportunities on the external labor market" (p. 236). These two reasons show that the intention to leave the company not only depends on individual factors, but also on situational factors (Nauta et al., 2009). Because these situational factors could rely on the state of the external labor market (Brown, Hesketh, & Williams, 2003), and organizations cannot control the external labor market, it is critical that organizations not only know the employee intentions to leave but also influence the employability of its employees (Nauta et al., 2009). Specifically, pull motives said Nauta et al. (2009) "are particularly dictated by peoples' upward career ambitions and relate to opportunities outside their current job or organization" (Van Vianen et al., 2004; cited by Nauta et al., 2009, p. 238). Again, the individual is in a position of making decisions related to the expectations he/she has about what might happen in the future; and his/her opportunity cost, in this case, is a future-oriented decision (Yip, 2014).

By another side, Cotton and Tuttle (1986) stated that, since early last century, there are hundreds of qualitative and quantitative studies on employees´ mobility intentions, who have contributed to the understanding of this phenomenon. Cotton and Tuttle (1986) meta-analysis permitted to identify 26 related variables that have been classified as (a) external factors (b) factors related to work and (c) employees' personal characteristics (p. 57). Additionally, they found that it is important to consider the type of industry where employees' mobility happens, due to the perception that employees have about their income,

economic alternatives, union presence and work satisfaction which are predicting factors for this mobility. That is why it is not enough for future research to emphasize only in variables related to employees' mobility intentions, but it is necessary that any investigation can determine if these variables could have a cause-effect relationship with moderating involved variables that could affect this relationship (Cotton & Tuttle, 1986). It is important to note about employees´ mobility intentions; scholars refer to the perceptions that employees have about the different factors evaluated, and how these influence their possible decisions, why the assessment of perceptions cannot be taken as cause and effect. The same applies to the results found in the meta-analysis by Griffeth et al. (2000) presented below.

Another meta-analysis done by Griffeth et al. (2000) about antecedents and correlations of employees' mobility intentions revealed many aspects to be considered in this study: (a) "high performers are less likely to leave a company than those of low performers" (p. 480); (b) "employee age is less negative in older populations, because older samples have greater tenure"; (c) "the performance-turnover correlation is negative when rewards contingencies exist, but positive when contingencies are absent; thus, when high performers are not sufficiently rewarded, they leave the company"; (p. 482); (d) "women are more likely to remain as they age than are men"; (p. 484); (e) "where collective reward programs replace individual incentives, their introduction may actually stimulate greater exits among high performers" (p. 485); (f) "the findings suggest which managerial interventions may most effectively deter quits" (p. 486); and lastly (g) Griffeth et al. (2000) agreed with Cotton and Tuttle (1986) about the importance of including in this type of studies moderating variables, for their ability to influence the relationship between the independent variable and the dependent variable. And therefore these scholars invited to discuss decisions made by individuals who are part of future studies related to employees´ mobility intentions.

On another hand, Boyar et al. (2012) summarized the reasons employees have to leave a company: they are not fulfilled expectations about their work, employment profile imbalances, lack of opportunities to grow professionally, lack of knowledge, stress, unbalance between personal time and time devoted to work, increase in working hours, not gratifying work environment, lack of leadership, non-attractive benefits, and competitor's talent hunters (Banerjee, 2007; Chaudhuri, 2007; Ramani & Raghunandan, 2008). According to these recommendations, in this study are considered these elements: age, rewards, genre, opportunity to grow professionally, level of knowledge, benefits, and type of contract; because they are more related with the predictors, and because they could affect the decision of employees against the proposed options: stay or leave the organization.

Barak et al. (2001) found that different employees' mobility antecedents could be grouped into three categories: (a) "demographic factors, both personal and work-related"; (b) "professional perceptions, including organizational commitment and job satisfaction"; and (c) "organizational conditions, such as fairness with respect to compensation and organizational culture vis-a-vis diversity" (p. 629). It is also important to highlight that previous studies have shown that intention to leave the company is known as the employees' mobility strongest predictor (Alexander, Lichtenstein, Hyun, & Ullman, 1998; Hendrix, Robbins, Miller & Summers, 1999).

Comparison between Barak et al. (2001) and Cotton and Tuttle (1986) meta-analysis about characterization done by each study on employees' mobility intentions, showed that researchers use different terms to refer to the same situation and use different classification criteria. Barak et al. (2001) expressed that research is limited because: (a) "no systematic method exists for measuring the various predictor or outcome variables"; (b) "often, the variables are operationalized somewhat differently across studies, leading to difficulty in interpreting meta-analytic findings"; (c) "different measures are sometimes used to assess

similar predictor variables"; and (d) "many authors employ original or other measures that have not been validated" (p. 655). This situation could generate confusion in researcher´s community, limit the prediction capacity of a variable, restrict research generalization capacity, and generate doubts about the validity of certain discoveries. The preceding limitations are considered in this study, and with the objective of maximizing the prediction power of variables incorporated in the model, the following was taken into account: (a) the constructs proposed in the model were selected considering the factors raised by Cotton and Tuttle (1986); (b) dimensions that explain the constructs used measures proposed by different authors, which they were validated in empirical research; and (c) the proposed measures for each construct were supported by previous studies. The importance of Barak et al. (2001) findings allowed them to discover that there are various factors that lead an employee to consider the possibility to leave the company for he/she works for.

In this sense, additionally literature revision permitted to state that employees' mobility intentions were correlated negatively with rewards (Campbell et al., 2012; Subramanian & Shine, 2013), but their analysis is limited to the perspective of monetary rewards. Martín (2011) found at an organizational level that retention, the other side of the intention to leave the organization, was correlated negatively with human capital (Martín, 2011). By another side, the meta-analysis studies mentioned above have recommended that all studies of intention to leave the company should include moderating variables. By its nature, employees' mobility intentions and predictors considered in this study, such as external rewards, internal rewards, and human capital are part of human resources strategic management. According to Park and Shaw (2013), the importance of human capital varies across industries and affects employees´ mobility intentions, "because organizations adopt different technologies and work structures depending on the characteristics of their industries" (p. 272). Park and Shaw (2013) were able to show that it is reasonable to expect a

difference between leverage industries in human capital and high-intensity capital leverage industries; this means that depending on the kind of each sectors' leveraging, some companies give more importance to human capital and others to capital intensity. Therefore, the objective of research of this study occurs among human capital leverage industries, such as the professional services sector intensive human capital (Campbell et al., 2012). Following academics such as Campbell et al. (2012), Juma and Lee (2012), Newman and Sheikh (2012), and Martín (2011) who suggested that in further research was important to analyze employees´ mobility intentions from perceptions that individuals could have about external rewards (H1) and internal rewards (H2) they receive, from perceptions that individuals could have the organizational support for human capital (H3). The casual relationships proposed in this study raised a negative correlation. Also, Yip (2014) suggested analyzing the relationship between rewards and opportunity cost. In line with the recommendations of Barak et al. (2001), Cotton and Tuttle (1986), and Griffeth et al. (2000) it included in this study the opportunity cost of the employee as moderator variable between the rewards received by the employee and employees´ mobility intentions. Also where individuals go when they think of leaving the company for which they work, whether creating enterprise (Campbell et al., 2012; Mobley, 1982a) or link to another organization (Campbell et al., 2012).

This study posits that depending on mobility, the specialized employees with higher levels of extrinsic rewards and intrinsic rewards if he/she decides to leave the University; he/she has greater probabilities to create a new venture, which the employee with lower levels of extrinsic rewards and intrinsic rewards. Also, a faculty which perceives that the University values human capital if he/she takes the decision to leave the University, it´s more probable that he/she create a new venture, that the employee who perceives that the University undervalues human capital.

Furthermore, according to Agarwal, Echambadi, Franco, and Sarkar (2004); Bhide (1994); Burton, Sørensen, and Beckman (2002); Klepper and Slepper (2005); Mondics (2009), Stull (2009); and Taylor (2005) high performance employees are better than low performance employees at replicating complementary assets, and transferring resources and opportunities from the source firm. Indeed while high-performance employees have greater value creation potential, low-performance employees are limited in their ability to replicate complementary assets efficiently (Campbell et al., 2012). Thus, high-performance employees because their abilities, experiences, and status, they accumulate more firm-specific skills, resources, and personal knowledge, than low-performance employees (Coff, 1997; Williamson, 1975). In this sense, Campbell et al. (2012) found since high earners can appropriate most of the value they create, their motivation for exit could be twofold. First, they may believe they could generate or appropriate even more value outside their current firm because they see underexploited opportunities, poor fit with their skills, and other constraints at that firm (Agarwal et al., 2004; Klepper & Thompson, 2010). Second, high earners are likely to have diminishing marginal returns to pecuniary gain and may value non-pecuniary factors such as job satisfaction and autonomy more than low earners (Blanchflower & Oswald, 1998; Gompers, Lerner, & Scharfstein, 2005; Hamilton, 2000; Puri & Robinson, 2007; Teece, 2003). Starting a new firm enables them to fulfill nonpecuniary aspirations better than moving to an existing firm with constraining norms (p. 70).

For these reasons, high-performance employees want to overcome these limitations, and they are more likely to create new companies than join another organization. Because complementary human assets are easily transferable than complementary physical assets, so mobility and generating new businesses is more common in the professional services sector (Teece, 2003). These Campbell et al.´s findings (2012) mentioned above, also involve the opportunity cost of the individual and coincides with the hypotheses six (H6) defined for this

study. It tries to prove that conditional on employees´ mobility intentions, the employee with higher levels of extrinsic and intrinsic rewards, and who perceives that the University values human capital if he/she decides to leave the University, he/she has greater probabilities to create new venture than join another organization.

Extrinsic and intrinsic rewards

"Rewards refers to all forms of financial return, tangible services and benefits an employee receives as part of an employment relationship" (Bratton & Gold, 1994; quoted by Malhotra et al. 2007, p. 2097); and "work rewards refer to all the benefits that workers receive from their jobs" (Herzberg, 1966; Kalleberg, 1977; Mottaz, 1988; quoted by Malhotra et al., 2007, p. 2097). In 1968 Porter and Lawler identified two components of organizational rewards: extrinsic rewards and intrinsic rewards; in 1977 Katz and Van Maanan identified the third element, such as social rewards. According to Williamson et al. (2009), "extrinsic rewards describe the extent to which an employees' work environment provides tangible, material consequences, such as pay" (p. 31). "Intrinsic rewards refer to the extent that an employees' work environment provides intangible benefits that have internal consequences for psychological development and satisfaction, such as task autonomy" (p. 31). And "social rewards refer to the extent that positive interpersonal relationships, such as having good relationships with co-workers, are available in the work environment" (p. 31). Thus, extrinsic rewards resulting from non-job-related factors; intrinsic rewards resulting from the content of the job itself; and social rewards arising from interpersonal relationships in the job (Malhotra et al., 2007). About rewards Juma and Lee (2012) emphasized the importance of researching the type of incentives that employers could use to increase employees´ retention and affective commitment, with particular emphasis on extrinsic and intrinsic rewards, because they are necessary to reduce employees´ mobility intentions, for this reason, this study considered only extrinsic and intrinsic rewards and discarded social rewards and dimensions associated

with them. Research on extrinsic and intrinsic rewards have historically focused on organizational commitment, and the results indicate the importance of those in determining this. Because the research object of this study is not an organizational commitment, studies in this regard are not mentioned, and who want to know can locate them in the research realized by Malhotra et al. (2007).

Previous studies have shown that the ability to generate value for the Company is highly correlated with organizational rewards and other factors, such as education, experience, the motivation for work, networks (Shaw, Duffy, Johnson, & Lockhart, 2005), position within the company and responsibilities (Elfenbein, Hamilton, & Zenger, 2010; Williams & Livingstone, 1994; Zenger, 1992), and incorporate knowledge in human capital (Campbell et al., 2012). Variation in these factors among employees shows different results in value creation for the company; that's an additional reason for companies to become interested in managing interrelationship among these factors with the objective to reduce employees' mobility intentions (Barak et al., 2001). In this sense, it is important to take into account the costs in which a company incurs for employees' mobility, which can be more than 5% of the organization's functioning expenses, regarding hiring costs, formation and loss of productivity (Waldman, Kelly, Aurora, & Smith, 2004).

According to former approach employees with greater benefits in companies, have a better factor combination such as education, experience, motivation, relationships, knowledge, abilities, and skills that permit them to ascend more rapidly in the company and acquire greater responsibilities. Therefore, these employees gain greater authority and negotiation power, due to their abilities, and their increased capacity to replicate, these complimentary assets outside the company, becoming a credible menace if they decide to leave the organization and transfer these resources and opportunities to another company (Campbell et al., 2012). These authors identified at least three resources about this topic:

technologies, support to working teams, networks; and three opportunities: clients' attraction to a new firm, developing a new emerging market and creation of new products and practices. This potential menace is consistent with the company practice to provide these employees with monetary and non-monetary benefits with the objective to reduce employee's mobility (Williams & Livingstone, 1994; Zenger, 1992). In this sense, Coff (1997) presented cases in which different companies developed human capital management strategies, such as shares participation, incentives based on performance, and high-level participation in making critical decisions, that were offered to high-performance employees for their capacity to add value to the company, reducing the desire to leave the company. However, "the risk of turnover is a problem because the firm may lose its most critical assets if they become dissatisfied, underpaid and unmotivated" (p. 377). These results match the affirmation of Angel and Canella (2004) in the sense that the salary factor is the one that produces the greater employees' mobility try out.

According to Campbell et al. (2012), there is a negative correlation between employees' earnings and the employee's intention to leave the company. This relationship confirms the cause-effect relation between the two variables and suggested that this relationship can be proved in future research in other professional services sector of high intensive use of knowledge specifically "financial, management, consulting, education, and health care" (p. 71). Additionally, they showed in the legal sector in the USA, when high-performance employees receive greater benefits, they reduce the likelihood of leaving the organization in which they work. But if they take a decision to exit the company, the probability for them to create a new firm is greater; while the employees with less performance and benefits, tend to join another competitive company more quickly. Campbell et al. (2012) operationalized employee´s earnings as salary, bonuses, and other reported income. According to Newman and Sheikh (2012) employees' earnings take part from

organizational rewards, specifically extrinsic rewards, and they operationalized organizational rewards according to extrinsic, intrinsic and social rewards. Subramanian and Shine (2013) found a negative relationship between rewards and employees´ mobility intentions, like such intrinsic rewards and employees´ mobility intentions. Also, Malhotra et al. (2007) compiled the four dimensions that explain extrinsic rewards, such as working conditions, pay satisfaction, satisfaction with fringe benefits, and promotion opportunities (Mottaz, 1988). Also, they summarized the six dimensions that explain intrinsic rewards that correspond to intangible benefits, such as role clarity, participation in decision making (Glisson & Durick, 1988; Singh, 1998); skill variety, autonomy, feedback (Hackman & Oldham, 1976), and training (Armstrong, 1993). Social rewards refer to interpersonal relationships in working environment, like the ones developed with the boss and coworkers.

Foong-Ming (2008) found that "rewards are substantially related to turnover as employees who are satisfied with organizational rewards will believe losing such a competitive reward to be costly and would not find such compensation elsewhere, and therefore they choose to stay" (p. 4). He also showed that employees who perceived satisfaction monetary rewards they receive, do not consider the alternatives offered to them by other organizations, also Subramanian and Shine (2013). This finding shows the opportunity cost of the employee in the analysis of the relationship between, the employees´ perception about rewards and his/her intention to stay or leave, according to the results of perception. Foong-Ming (2008) also found a negative, but weak relationship between organizational rewards and turnover intention in research with knowledge workers in Malaysia. Nevertheless, Subramanian & Shine (2013) found that the best predictor of employees´ mobility intentions was rewarded which explained 86.8% of the variations, with the addition of the other four predictors they explained 92.2% of the changes; in this sense, they found a statistically significant negative relationship between rewards and employees´

mobility intentions; for this reason this study considered not only monetary rewards but also included internal rewards (Juma & Lee, 2012; Newman & Sheikh, 2012).

Malhotra et al. (2007) deepened into the study of psychological contract and showed that a significant factor that strengthens the employer-employee relationship is the provision and rewards from the organization, that it is based on reciprocity. These occur when the company meets the needs and expectations of the employee (Haar & Spell, 2004). In consequence, the employee prefers to remain in the company as a result of the positive feelings that he/she experiences (Newman & Sheikh, 2012). This decision employee manifest the two options presented in this study: stay or leave the organization, according to the assessment that he/she makes about his/her experience in the organization; and therefore in this decision the employee expresses his/her opportunity cost. Newman and Sheikh (2012) also suggested for future research to examine the relationship between organizational rewards and something more objective such as employees' mobility because their study assessed the relationship between organizational rewards and employee commitment. Therefore, the following elements that operationalized the employees' earnings variable in this study are related only to extrinsic rewards, such as working conditions, pay satisfaction, satisfaction with benefits, and promotional opportunities. The other elements that operationalized intrinsic rewards are role clarity, skill variety, autonomy, feedback, training, and participation in decision- making (Malhotra et al., 2007). This study not considered social rewards because this kind of rewards is not significant for professors due the academic nature of the faculty in a University. In this sense, Choi et al. (2012) expressed that "most of the time, faculty works independently in imparting knowledge to their students. Some contact hours with their superiors are minimal because faculty normally have high autonomy on executing their task" (p. 579-580). Also, these scholars found that leadership styles don't have significant relationships with employees´ mobility intentions who belong to the academic staff. From

this point of view, social, organizational rewards that consider the interactions between the boss and the employee have a lower level of impact on voluntary turnover; and for this reason are discarded in this study, both the analysis of social rewards, as analysis about the relationships between professors and their boss.

The definition of the concepts used in this study was taken and adapted from Malhotra et al. (2007). In relation with extrinsic rewards: (a) working conditions refer to an essential elements for professors to perform their functions and influencing employees' job attitudes (Rust, Stewart, Miller, & Pielack, 1996); good working conditions would be perceived as a significant reward in all types of work environments; (b) pay satisfaction refers to the amount of money received by the employee, according to the amount of work done; also it includes satisfaction with pay compared to the amount spent in similar organizations; (c) satisfaction with fringe benefits refers to satisfaction, perceived by employees with additional benefits package offered by the organization, "not only in terms of what their organization offers but also relatively in terms of what other similar organizations offer" (Malhotra et al., 2007, p. 2100); and (d) promotional opportunities refers to the adequacy and satisfaction perceived by employees, about the promotion policy of the organization and the opportunities available to move up within the organization. In relation with intrinsic rewards: (a) "role clarity is the degree to which employees perceive that required information is provided about how the employee is expected to perform his/her job" (Teas, Walker & Hughes, 1979; cited by Malhotra et al., 2007, p. 2102); (b) skill variety "refers to employees' perceptions of the extent to which a variety of skills and abilities are required to perform the job and the degree to which the work is challenging and free from monotony" (Malhotra et al., 2007, p. 2102); (c) autonomy refers to the perception of employees regarding personal initiative that the organization allows them to perform their functions (Hackman & Oldham, 1976); (d) feedback "refers to employees´ perceptions of the feedback received from their supervisor in

terms of how well they are performing, and includes the recognition and praise received from their immediate superior for good service delivered" (Hackman & Oldham, 1976; Young, Worchel, & Woehr, 1998; cited by Malhotra et al., 2007, p. 2103); (e) training "refers to the employees' perceptions as regards to induction and continuous and regular training received by them for providing quality service"; and (f) "participation in decision- making refers to the degree to which employees perceive they have the ability to influence decisions related to their work (Teas, 1983)" (Malhotra et al., 2007, p. 2104). This study used the model of Malhotra et al. (2007) to build both the structural model, which is presented at the end of this chapter, as the measurement model.

Human capital

As a concept takes little more than 50 years since the Nobel economics, Theodore W. Schultz in 1961 as first used. Since then, the business literature of the last decades has been included under this concept diverse and heterogeneous elements. However, beyond the many existing definitions, there seems to be some consensus in determining the human capital as the set of skills, experience and knowledge of the staff of an organization (Bart, 2001; Coff, 2002; Hambrick & Mason, 1984; Lin & Chang, 2005; Polanyi, 1966; Yi-Ching et al., 2012). According to Davenport (1999), the evolution of the human capital concept shows three stages: as a cost, as an asset, and as an investor. In this regard, Seguí Mas (2007) summarized the human capital in three stages. The first stage, human capital as a cost refers to people in the organization are essential for the exercise of generating income, and value perception it focuses on the cost involved in having those individuals and their control, then it is necessary to accumulate human capital (Mankiw, Romer & Weil, 1990). In the second stage, as an active, people in the organization are seen as resources that are expected to benefit in the future, and they are under their control (Coff, 1997). In the last stage, as an investor, in which the work has been characterized among others by higher employee turnover, and increased

the bargaining power of these, it used the metaphor of the investor (Campbell et al., 2012; Davenport, 1999). In this stage, the individual, rather than invest in the company with his/her money, he/she does with his/her time, knowledge, skills and experience. About the concept of human capital as an investor, Davenport (1999) defined four main factors that enable individuals to invest in human capital: (a) intrinsic job satisfaction (e.g. interest employment approach challenges, creativity, etc.); (b) opportunity for development and progress within the organization; (c) recognition of individual achievements and the contribution made to the entire organization; and (d) financial rewards, especially based on worker productivity. The importance of these four factors is that investment in human capital leads to greater benefit because growing it, also the production, and generates economic growth, even on per capita GDP (Guisan, Neira & Aguayo, 2001). According to the human capital theory developed by Becker in 1964, “individuals with better qualifications, such as more education, job training, and relevant work experience, receive better jobs and organizational rewards because they have more to offer their organizations than do individuals who are less qualified” (Greenhaus & Callanan, 2006, p. 334).

Under this same concept of human capital, as an investor, other researchers had concluded that employees who handle and have a highly valuable knowledge and skills are a resource of great value in organizations because they are difficult to imitate and replace (Barney, 1991, 1995; Barney & Wright, 1998; Lado & Wilson, 1994); what makes them the right strategic human capital that any organization should seek to develop and retain (Boxall, 1996; Lepak & Snell, 1999), this means that this type of "strategic employees must be managed in a particular way, to promote their performance and ensure the maintenance of human capital in the organization" (Cano & Cano, 2006; Kang, Morris & Snell, 2007; Lepak & Snell, 2002; Morris, Snell & Lepak, 2006; cited by Martín, 2011, p. 2). Maintaining that human capital involves retaining not only their knowledge and skills but also their feelings,

attitudes, relationships and interactions, to ensure the permanence in the organization of the whole of their knowledge and skills by these employees bring value to the same (Martín, 2011).

The research interest of this study incorporates human capital construct, which is explained by the dimensions: intellectual capital, social capital and affective capital (Gratton & Ghoshal, 2003), which should not be confused with the social capital or structural capital which are the organizational level (Youndt & Snell, 2004). However, the literature speaks without distinction of human capital and intellectual capital, which was considered initially formed by knowledge, skills, and experiences of employees (Edvinsson & Malone, 1997; Youndt & Snell, 2004). In a further development of human capital, it was considered a capacity of the organization, in the sense of ability to extract the best solutions through knowledge of employees. Therefore the idea that human capital constituted joined the sum of tacit and explicit knowledge (Bontis, 1998; Bontis, 2001; Bueno, 2002; Ordóñez de Pablos, 2003), giving space to the incorporation of social capital. Finally, Gratton and Ghoshal (2003) added a third dimension called affective capital and extended the conceptualization of human capital to three dimensions: intellectual capital, social capital and affective capital.

According to Gratton and Ghoshal (2003), intellectual capital refers to cognitive attributes, learning ability, the explicit and implicit knowledge and the skills and experiences that the individual possesses over time; social capital refers to relationships and social networks owned by the individual, and constitute a form of capital because of the possibility of access to resources that other members own or have access; however, this knowledge and these relationships can become concrete actions; individuals need the affective capital (Martín, 2011); and affective capital refers to self-knowledge, self-esteem, and integrity, essential features for people to transform their knowledge and relationships into effective actions (Martín, 2011). These three dimensions of human capital are closely interrelated and

must be understood in an integrated and jointly. Thus, while social capital helps the individual to develop their intellectual capital through access to knowledge and skills that others possess; "affective capital facilitates integrity and self-confidence to establish open and trusting social relationships that develop social capital. And, in turn, learning and increased knowledge and skills, the individual develops self-esteem and self-confidence strengthening, improving their emotional capital." [“el capital emocional, facilita la integridad y autoconfianza para establecer relaciones sociales abiertas y de confianza, que permiten desarrollar el capital social. Y, a su vez, el aprendizaje e incremento de conocimientos y habilidades, desarrolla al individuo fortaleciendo su autoestima y autoconfianza, lo que mejora su capital emocional.”] (Martín, 2011, p. 48). This cycle of interaction is what allows not only understand more fully human capital but to improve it.

Regarding the intellectual capital Edvinsson and Malone (1997) stated that intellectual capital consists of knowledge, skills and experiences of employees, and all those elements that surround, energize, give structure and support them. Other researchers such as Youndt and Snell (2004) stated that intellectual capital has three components: (a) knowledge, skills, and experiences of individuals; (b) resources built through networks of relationships (Adler & Kwon, 2002; Nahapiet & Ghoshal, 1998); and (c) institutionalized and codified knowledge in routines, manuals, databases, structures experiences, etc. (Martín, 2011). Needless to say, this study focused exclusively on capital linked to the individual; and the conceptualization of intellectual capital used is adapted to the level of the person as an employee.

Regarding the social capital Nahapiet and Ghoshal (1998) stated that this capital refers to "the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by individual or social unit" (p. 243). This proposal, one of the most accepted on the subject, notes that relations between employees and groups adds value and enhances the strategic capacity of the company

(Reagans & McEvily, 2003). Also Youndt and Snell (2004) defined social capital as the ability of the company to exchange and move knowledge among stakeholders. Martín (2011) identified that the social capital has three common elements: the participation of stakeholders, the movement of knowledge, and the support of structure relationship networks, which support and move knowledge between the different actors within and outside the organization (Adler & Kwon, 2002; Leana & Pil, 2006; Leana & Van Buren, 1999; Nahapiet & Ghoshal, 1998). Additionally, Leana and Pil (2006) identified two types of social capital: internal and external. While internal social capital refers to the interactions that occur between members of the organization (Coleman, 1990; Leana & Van Buren, 1999; Leana & Pil, 2006); external social capital refers to interactions between members of the organization and its suppliers (Leana & Pil, 2006). This study focuses only on the first.

Regarding the affective capital that has its roots in the studies conducted by Elton Mayo in the decade of the 20's and 30's of the twentieth century, it has not had a theoretical development of the magnitude of this capital mentioned above. Recently, McGrath and Van Burskirk (1999) defined it as the ability of the organization to maintain a sustained manner over time, a positive assessment among employees belong to the same taking advantage of the development of organizational culture. Other researchers believe that the affective capital is complementary to the intellectual capital, and it can distinguish between external and internal (Thomson, 2001). The first is one that is present in "the heart of customers," and the second is one that is present in "the heart of the employees" (Martín, 2011). This study focuses on the latter and refers to feelings, beliefs, and values expressed by employees who are part of human capital (Gendron, 2004, 2007; Gratton & Ghoshal, 2003). Also, Gratton and Ghoshal (2003) defined the affective capital as the capital needed to take action. This definition is according to the opportunity cost concept mentioned above, and that is related to the process of choice (Robbins, 1934).

Researchers like Lengnick-Hall and Lengnick-Hall (2006), Subramanian and Youndt (2005), and Youndt and Snell (2004) highlighted the importance of strategic and competitive advantage for the company that has the human capital, given its particular character as a unique resource and intangible, and its renewable nature (Afiouni, 2007); by the ability of employees to keep learning and creating new knowledge (Martín, 2011), and as a differentiating factor between organizations.

According to the concepts presented above on human capital and the dimensions that explain it; the intrinsic motivations have greater power to induce employees to change that monetary incentive (Ellerman, 1999). In this sense, Lin and Chang (2005) found that problems related to employees' mobility intentions are primarily involved in organizations where productive capacity focuses on human capital, and specifically in knowledge, skills and abilities (KSAs). Consequently, in these companies where employee turnover is high, the productive capacity generates hard implications for quality, consistency and services stability. This risk makes companies see the necessity of creating strategies to minimize employees' mobility intentions. In this sense, Campbell et al. (2012) found that organizations that developed better human capital management strategies, generate high-performance employees, who created a higher value for the company. Also, Valentine, Godkin, & Lucero (2002) showed that when an individual perceives that their company culture aligns with their personal values, personality, and career goals, they respond emotionally and come to believe they are members of the organization. Indeed they showed that a higher perception in this sense generates in employee a desire and commitment to stay in an organization, and therefore a negative relationship between human capital and intention to leave the organization (Felps et al., 2009; Mitchell, Holtom, Lee, Sablynski, & Erez, 2001). "The feelings individuals develop for their environment represent the relational switching cost of leaving … individuals who find a strong link between their values and those of their

organizations will have less turnover intention" (Yu-chen, 2015, p. 742). In line with this findings, Subramanian and Shine (2013) found that employees who work "in an environment where they can express themselves and develop with more interpersonal support and opportunities for career advancement, the employees are more likely to stay in the organizations" (p. 1757). According to Yu-chen (2015), several studies showed a negative relationship between personal human capital and turnover intention (Chatman, 1991; Kristof-Brown, Zimmerman, & Johnson, 2005; Verquer, Beehr, & Wagner, 2003; Wheeler, Buckley, Halbesleben, Brouer, & Ferris, 2005; Wheeler, Gallagher, Brouer, & Sablynski, 2007; Yu-chen, 2015). Then, when companies generate intentionally changes in any of these dimensions about human capital, these decisions permit them to reach their organizational objectives faster or getting away from them, at a faster rate, depending on the employee's choice (Campbell et al., 2012). According to Robbins (1934) in this case, the opportunity cost concept for employee appears primarily related to the process of choice, linked to his/her intrinsic motivations (Ellerman, 1999); and linked to at least two courses of action (Yip, 2014), to stay or leave the company (Campbell et al., 2012). In this decision "it is crucial to know what value has been given up by rejecting other choices" (Thirlby, 1946; cited by Yip, 2014, p. 10). As well as this value is associated with better or worse perception, that the employee has about the development of his/her affective capital in the organization for which he/she works for; because this capital is that a person needs to take action (Gratton & Ghoshal, 2003). Indeed, "when employees perceive a match with their company´s values, their intention to pursue outside opportunities decreases and they may rationalize away unsatisfactory conditions … human capital plays an important role in an individual's choice of the work environment" (Yu-chen, 2015, p. 742, 751). Also, this scholar suggested in future studies to incorporate factors related to the work environment, helping to increase the understanding of the role of human capital within an organization; and should focus on a

variety of jobs to test the conclusions proposed by Yu-chen (2015). The present study incorporated these suggestions in the three dimensions of human capital proposed in the model, and also considered three different positions within organizations evaluated.

Importantly Ismail et al. (2011) showed that employees with a higher education level are less likely to change job because they have a stable career according to educational attainment. Therefore the influence of salaries and incomes are the main reason to change jobs. Also, it is important to point out that Nicolaou and Birley (2003) partially controlled for the opportunity cost associated with pursuing the exodus route, and they found that tenured academics might be less likely to leave academia to pursue entrepreneurial ambitions (Amit, Mueller, & Cockburn, 1995). On the other hand, gained labor experience turns into an opportunity to reach another position in an easier way. Campbell et al. (2012) acknowledged that the population they studied didn´t include employees with high levels of knowledge, skills, education, experience and work ethic, and they suggested do it in future research; because the results about the intention to stay or leave the organization may be different. These findings, among others, lead to select as objective population for this study, University professors, because there are people with different education levels, experience, tenure, training, and type of contract. Following Ismail et al. (2011) factors such as level of education and extrinsic rewards received in the organization, can generate that University professors evaluate their opportunity cost regarding stay or withdraw from the University, according to the perception they have about these factors.

Additionally, Martín (2011) developed a research model which evaluate, from the organization, the relationship between the human capital development and the activities developed by it to retain employees. Also, she suggested that in future studies, an interesting extension of their research would be to analyze employee retention from the employee. In another word mean explaining the employee's intention to remain or withdraw from the

organization, because this level of analysis allows researching the accurate perception of the employee about HR practices in organizations for which he/she work for, and the impact on his/her behaviors and attitudes. It is important to remember, as previously expressed, the intention to leave the company and retention is two sides of the same coin (University of Guelph & Chawla, 2005; White, 2001). Similarly, Martín (2011) suggested that future research analyzes the influence of sector to which the organization belongs, tenure and age of workers, deepening its impact on the employee's decision to stay or leave the organization. For this reason, this study considered in the model proposed, not only the relationship between human capital and employees´ mobility intentions, but also the analysis related to satisfaction with salary and fringe benefits, as well as, the employee perception about human capital development in the organization he/she works for, taking into account tenure and age of the employee.

It is important to highlight that Crook et al. (2011) did a meta-analysis about human capital and performance of the company, and they did not find evidence to demonstrate that the relationship between human capital and the company's performance was stronger in longitudinal character studies than in cross-sectional ones. According to Barak et al. (2001), this means that in spite of human capital development requires time and money to develop or acquire such capital and harvest its benefits; the human capital does not depend on a long-term temporal component to capture the effect that human capital has on performance. Therefore, it is possible to develop a cross-sectional study without affecting results. Additionally, this study did not try to analyze human capital firm's performance relationship, because the unit of analysis of this study is the individual. In this sense, it focuses on identifying the employee's perception about the development of intellectual capital, social capital and emotional capital in the organization.

The dimensions operationalize human capital included in this study are intellectual capital, social capital and affective capital. Control variables such as public or private sector, higher education level, age, and tenure (Yi-Ching et al., 2012), were taken into account to characterize the population.

Opportunity cost

Smith (1776) was the first academic that introduced the concept of opportunity cost, but only until the decade of the seventies in the last century this concept generate the first debates, "when scholars of the London and Austrian Schools made use to urge and argue that the socialist view was incorrect in arriving at an optimal resource solution for society" (Buchanan, 1973; cited by Yip, 2014, p. 13).

These London and Austrian scholars argued that, in a planned economy, it would be impossible to arrive at any optimal social choice calculations, because the choices of actions of people at large could not be transformed or transferred to the knowledge of the social planners. Individual choices, they argued, were selected based on the concept of opportunity costs, which were, in essence, a value judgment that could not understand or transformed into the knowledge of other people. Therefore, the opportunity cost concept could be used to prove the impossibility of optimal socialist calculations (Yip, 2014, p.12-13)

It is important to note that the London scholars laid on the assertion that cost was primarily related to the individual process of choice, of giving up and take, which was necessarily a personal process that was hard to be communicated and agreed by other persons except the choice maker himself (Robbins, 1938; cited by Yip, 2014, p. 18). According to this, the commonly accepted definition of opportunity costs is "the highest possible value that has been sacrificed or given up by the selection of a particular course of action and reject the other alternative course of actions" (Amey, 1969; CIMA, 1984; Coase, 1938; Drury, 1992; Schumpeter 1954; cited by Yip, 2014, p.9).

The definition of opportunity costs has several issues which are fundamental to this concept. About the first point, Robbins in 1934 considered that the concept of opportunity cost is mainly related to the process of choice. It implies that there are at least two alternatives and that the individual could take for himself the decision of the course of action that he/she will; then, the value of the rejected option is the amount he/she sacrificed, and his/her opportunity cost (Yip, 2014); when this occur, "the extra benefits from taking the action are at least as great as the extra costs" (Frank & Bernanke, 2013, p. 4).

Additionally, in 1946 Thirlby pointed out that "it is crucial to know what value has been given up by rejecting other choice," (cited by Yip, 2014, p. 10), issue that Greenberg and Spiller (2015) called neglected opportunity cost. In regard, the second issue Coase in 1938 described the importance of non-monetary factors in a decision because the calculation of opportunity cost is not necessarily the same as they do accountants. For that reason, Coase said that "the figures of costs and receipts produced by the accountant are incomplete, and without a knowledge of the preferences of the businessman no decision on questions of business policy can be reached" (p. 103). Later Buchanan (1973) stressed that the close relationship between the opportunity cost and the subjective value judgment made by the decision-maker, that implies non-monetary considerations, makes that this decision is tough to communicate to others. And the third issue is that the opportunity cost refers mainly to costs of a future-oriented decision, and therefore relates to the expectation that the decision-maker has about what will happen in the future (Yip, 2014). According to Yip (2014), these three "fundamental characteristics of the concept of opportunity costs raise doubts to the applicability of decision cost models when most of these cost models are based on accounting costs calculations" (p. 12). Significantly, the opportunity cost is linked to the concept of individualism, where a person is free to choose and make their decision, even if this choice is sub-optimal or wrong. In connection with the above, the modern management theory and

behavioral sciences recognized that the individual is multipurpose, not only economic and rational. Therefore, he/she makes decisions and acts on different problems apart from the pure economic motive only, in order that he/she achieves some other purposes that are not economic in nature (Drucker, 1990; Jensen & Meckling, 1994; Yip, 2014). Then opportunity cost is a situational concept that can be interpreted in different ways under different circumstances (Yip, 2014).

Greenberg and Spiller (2015) put particular emphasis on the neglected opportunity cost because all choices involve forgone alternatives. For example, in connection with this research, choose to stay means not leaving the organization; then the value of the alternative "not to leave the University" is the opportunity cost option “to stay.” Greenberg and Spiller (2015) found that the salience of opportunity costs changes the choices that individuals make, and they suggested that opportunity costs also alters peoples´ preferences for alternatives. So they proposed that factors affecting the consideration of opportunity costs should moderate the effect of choices on preferences, and therefore will cause greater changes in preferences. Also, these scholars considered that “many choices are made in the absence of salient opportunity costs, the effect of such salience on choice-induced preferences has received scant attention in the literature” (p. 10). This research considered both recommendations, thus examined the opportunity cost of the employee as a moderator factor of choices on preferences to stay or to leave the organization, as stated above. According to Greenberg and Spiller (2015), all items of the questionnaire were previously adapted to this research, seeking to highlight the importance of choice preferences of respondents, because it has received scant attention in the literature.

In line with this approach, Nicolaou and Souitaris (2015) demonstrated in a study at a European University with inventors professors, who felt that greater organizational support were those who were more likely to stay at the University in the longer term. In their

research, they used the opportunity cost as a control variable, and they measured it with these items: academic seniority, articles, position, and age. The criterion for choosing the manifest variables that measure the opportunity cost was based on research Nicolaou and Souitaris (2015). The manifest variables are organization status [public or private and accredited or non-accredited], position within the University, tenure, work experience [years of teaching experience], number of articles published in professional journals in the last year, age, level of education, salary and type of contract.

Price (2001) noted that opportunities could have an adverse impact on the employees´ mobility intentions through job satisfaction; for example, other employment options in the environment can be considerably better than their current jobs ±, more benefits than costs. "Comparing what is [their current jobs] with what could be [the alternative jobs] may produce more dissatisfaction, thereby indirectly increasing turnover. If the alternative jobs are not better than the current position, then turnover is not likely to occur" (p. 603). These findings coincide with the hypotheses 4 and 5 of this study because they intended to prove that the opportunity cost of the employee moderates the relationships between extrinsic rewards and employees´ mobility intention (H4), and the relationships between intrinsic rewards and employees´ mobility intention (H5). The conclusions about these hypotheses may extend the opportunity cost of the individual regarding decision making by the individual, because the concept proposed in this study is linked to the decision that he/she could do, either to stay or to leave the University, according to his/her highest or lowest level of satisfaction expressed by him/her. In conclusion, "by evaluating the opportunity cost, the employees will to decide whether to stay or to leave" (Hsin-Yun, Wei-An & Cheng-Kiang, 2011, p. 148); it "is an individual choice behavior. Thus, the individual is the primary unit of analysis" (Mobley, Griffeth, Hand, & Meglino, 1979, p. 493).

It is important to note that the reasons because the salary was included into the measurements of opportunity cost of the employee, this decision resides in previous studies. Indeed, Beaudin (1993) defined as the opportunity cost of staying in teaching "as the average starting salary offered to new college graduates with the same bachelor's degree" (p. 62). Rickman and Parker (1990) "adopted two different measurements: a) the wage differential between teaching and all other occupations, and b) the wage differential between teaching and occupations to which teachers in the Current Population Survey (CPS) move." Feng (2009) found that "not only does the salary a teacher currently makes affect the probability of staying at their current school, the salaries at other schools in which a teacher could potentially work could determine their opportunity cost and, hence, the likelihood of a move" (p. 1173); in the same sense, "better wages in other professions will entice teachers to abandon teaching and seek employment in other occupations" (p. 1172). Imazeki (2004) employed "two measurements of the opportunity cost of staying in one's current school district. The first measurement is the ratio of a teacher's current salary to the average salary in the Cooperative Education Service Agencies (CESA) [in USA]. The second measurement is the same as for a teacher with a master's degree and 10 years of experience" (cited by Feng, 2009, 1173). Additionally, Feng (2009) found that "a teacher's opportunity cost of staying in teaching is measured by county-level alternative wages for teachers in other occupations. The higher this measure is, the higher the probability of all three departure decisions" (p. 1180).

Up to now, literature review has revealed that extrinsic rewards are negatively correlated with employees' mobility intentions (Campbell et al., 2012; Subramanian & Shine, 2013), like such intrinsic rewards and employees' mobility intentions (Subramanian & Shine, 2013), and human capital is negatively correlated with employees' mobility intentions (Martín, 2011; Yu-Chen, 2015). Indeed previous studies have shown that human capital has a

positive correlation with extrinsic and intrinsic rewards, increasing their negotiation power against the company (Becker, 1994; Campbell et al., 2012, Coff, 1997). The literature review also showed two possibilities when an employee takes the decision to leave the company either to generate a new venture or to join to another organization. Also, the literature suggested that it is necessary in studies about employees´ mobility intentions to consider a moderator variable (Cotton & Tuttle, 1986), and in the particular case of this study, the moderator was the opportunity cost of the employee. Indeed based on literature review, this study tries to propose and empirically test a model that explain the employees' mobility intentions since a perspective based on the relationship between predictors and endogenous construct, using the opportunity cost of the employee as a moderating variable in both relationships. First between extrinsic rewards and employees´ mobility intentions, and secondly, between intrinsic rewards and employees´ mobility intentions.

The model presented in Figure 1 at the final of this chapter suggests that employees´ mobility intentions are moderated by the opportunity cost. In that sense, when the professor perceives that he/she better extrinsic and intrinsic rewards, he/she is most likely to remain in the organization. The first part of the model proposed three exogenous constructs that are negatively correlated with the intention of withdrawal of the organization; these constructs are extrinsic rewards, intrinsic rewards, and human capital, these constructs are focused on the study of University professors, as key institutions of higher education employees. Therefore, at the organizational level decreased rotation of such employees is essential to ensure the three key components of any University: teaching, research, and extension (Ley 30, 1992). The extrinsic rewards construct is explained by four dimensions; the intrinsic rewards construct is explained by six dimensions (Malhotra et al., 2007); and human capital construct is explained by three dimensions (Barney & Clark, 2007; Gratton & Ghoshal, 2003).

Operationalization of each of the constructs is as follows. Regarding the extrinsic rewards that correspond to the material benefits, the dimensions used were: working conditions, pay satisfaction, satisfaction with benefits and promotion opportunities. But nevertheless, supervision and team support are discarded because that these last two dimensions are not significant about the population under study (Choi et al., 2012). About the intrinsic rewards that correspond to the intangible benefits the dimensions used were: role clarity, skills variety, autonomy, feedback, training and participation in decision-making. About human capital the dimensions used were: intellectual capital, social capital and affective capital. Intellectual capital that corresponds to the knowledge, skills, and experience possessed by each employee; social capital that correspond to social relations established between employees of the organization; and affective capital that corresponds to the professor´s bond of affection his/her University.

The second part of the model focuses on moderation that the opportunity cost of the employee can exert on the both relationship, first between extrinsic rewards and employees´ mobility intentions, secondly, between intrinsic rewards and employees´ mobility intentions. The dimensions that operationalized the construct opportunity cost of the employee were mentioned above.

The third and last part of the model considered the decision that could take University professor, associated with his/her desires to stay or to leave the University. If the professor would take the decision to withdraw from the organization, he/she will have two options to create their company or be linked to an existing organization.

Produced relations between the constructs that make up each of the parts of the proposed model, just described lead to the definition of the fundamentals hypotheses, and hypotheses that collect such relations individually. According to this approach, the research hypotheses were distinguished: (a) hypotheses on direct relations between extrinsic rewards,

intrinsic rewards and human capital on employees´ mobility intentions; (b) hypotheses about the moderating effect of the opportunity cost of the employee in both relations between extrinsic rewards and employees´ mobility intentions, as intrinsic rewards and employees´ mobility intentions; and (c) one hypothesis that conditional on employees´ mobility intentions collect measures about the decision to create a new venture or join another organization, depending on the high or low levels of perceptions of professors regarding the independent variables. The proposed model responded to the following research questions posed in this study set out as follows: (a) how much do variables like extrinsic rewards, intrinsic rewards, and human capital influence an employee's intentions to stay or to leave the company he/she works for?; (b) is there a difference in the decision-making of professor to stay or to leave the University for he/she works for, influenced by the moderating variable opportunity cost of the employee, taking into account his/her perceptions related to the extrinsic rewards and the intrinsic rewards that he/she receives?; and (c) conditional upon the intention to leave the University: is there a difference between the professor who choose to create a new venture and those who decide to link to another organization? Figure 1 shows the different parts of the model, constructs, relationships and assumptions of the model just presented.

Summary

Chapter 2 suggested from literature review a theoretical model that propose and empirically test a model that: (a) predicts employees´ mobility intentions from a perspective based on a relationship between extrinsic rewards; (b) predicts the effect of the moderator variable opportunity cost of the employee on the relationship between both rewards and employees´ mobility intentions; and (c) predicts the professor's decision to create a new venture or link to another organization, from his/her perceptions about the rewards he/she receives, and organizational support for human capital. Chapter 3 includes a discussion of the

population and sample, sampling methods, a description of the survey and data analysis. An explanation of reliability and validity is also presented.

Conclusion

According to Saunders et al. (2012) literature review on employees' mobility intentions contributed to the achievement of the following purposes:

1. Helping refines the questions and research objectives that allowed us to determine that the proposed study is essentially a problem related to human resource management involving different variables (Burns & Christie, 2013).
2. Exploring in the higher educational sector if there is a negative relationship between extrinsic rewards and employees´ mobility intentions, intrinsic rewards and employees´ mobility intentions, and human capital and employees´ mobility intentions.
3. To explore explicit recommendations on previous research about the importance of knowing the effect that the opportunity cost of the employee could have on the single relationships between extrinsic rewards and employees´ mobility intentions, and intrinsic rewards and employees´ mobility intentions. Also, the important of incorporating theoretical aspects of psychology, sociology and economics to achieve a best explanation of employees' mobility phenomenon (Barak et al., 2001). And, also the important of considering another type of intensive industries of knowledge where employee's mobility is present, because the perceptions that employees have about their earnings and their alternatives are predictors of such mobility (Cotton & Tuttle, 1986).
4. To avoid repeating work that others researchers had already done, identifying the possibilities of future research, and incorporating recommendations from different revised meta-analysis.

5. To count with a large sample of empirical and theoretical research on employees´ mobility intentions, which shed light on the definition of the research problem.
6. To discover and provide clarification about the statistic technique to follow, partial least squares. This technique was used by Bontis and Serenko (2007) who analyzed the capabilities of employees from a knowledge-based perspective, using human capital management practices as a moderating variable; and was used by Martín (2011) who analyzed different variables related to employee retention.
7. To discover and provide clarification about the time of the study. In this sense, the evidence support that human capital development, specifically knowledge, skills and abilities, do not depend on a long-term temporal component to capture the effect that human capital has on performances; consequently, it is feasible to consider that a cross-sectional study could be developed without adversely affecting the results.The most significant contribution of this study was to propose a predictive model of employees´ mobility intentions, which incorporated extrinsic rewards, intrinsic rewards and human capital as predictors, which included the opportunity cost of the employee as a moderator between rewards and employees´ mobility intentions.

Chapter 3: Method

This chapter presents the plan to answer questions and objectives of proposed research. It specifies the sources to collect data, and how to collect and analyze it. According to Saunders et al. (2012) research design consists of a methodology selection, research strategies, the choice of the time horizon conducting the study, and the collection and analysis of data. The development of each of these parts, according to Saunders et al. (2012) should be based on the nature of the research questions and objectives; it should also show consistency with research philosophy and coherence throughout the proposed research design. Additionally, the reader will find that the research questions are operationalized in a research project.

Research Method and Design Appropriateness

The quantitative research that characterizes this study begins with a quantitative study by Campbell et al. (2012) on employees´ mobility intentions in the professional sector of legal services in the USA. These authors developed a theoretical model that correlates the employee's earnings with employees' mobility intentions, and their findings enabled them to confirm their proposed hypotheses. Literature review permitted to find the existence of different theoretical models that directly or indirectly were related to employees' mobility intentions, as well as gaps in the literature, which showed other research needs, which are addressed in the proposal presented in this study. Specifically: extrinsic rewards (Campbell et al., 2012; Juma & Lee, 2012; Newman & Sheikh, 2012); intrinsic rewards (Juma & Lee, 2012; Newman & Sheikh, 2012); human capital (Martín, 2011); and opportunity cost of the employee (Greenberg & Spiller, 2015; Yip, 2014). Consequently, the study analyzed the following relationships: the direct relationship between extrinsic rewards and employees´ mobility intentions. The direct relationship between intrinsic rewards and employees´ mobility intentions. The direct relationship between human capital and employees´ mobility

intentions. The moderating effect of the opportunity cost in both relationships between extrinsic rewards and employees´ mobility intentions, as well as between intrinsic rewards and employees´ mobility intentions. And the relationship between the intention to leave the University and the intention to create a new venture or linked to another organization. The nature and correlation of these variables with employees' mobility intentions are also based on quantitative studies as shown in the literature review.

Given this background and according to the questions and proposed research objectives, this study followed the philosophical ontology of the whole being, proposed by Parmenides (515-445 BC) which emphasized that reality was composed of entities with properties clearly identifiable, which could be represented by symbols, words, and concepts. This ontology of the whole being is the one that has prevailed in Western philosophy (Gray, 2009). In line with this, the study adopted the objectivist epistemology that represents reality using signs and language, to make accurate representations of the external world. Objectivist epistemology states that there is an objective reality outside of consciousness, and therefore, this research sought to discover this objective truth (Gray, 2009).

However, the theoretical perspective that is more closely linked to the objectivist epistemology is positivism, and therefore in line with this approach, the research design of this study followed the positivist philosophy, which is associated with quantitative studies and examined the relationships between variables that are measured numerically and analyzed using statistical techniques. The central argument of positivism states that reality can be perceived by senses, then, research was based on scientific observations which were obtained through empirical research based on facts, not on values (Gray, 2009). Therefore, the results of this study can be incorporated into knowledge because the assumptions and the proposed theoretical model were subjected to the test of empirical evidence (Gray, 2009). From this perspective, the positivist philosophy indicated that data were collected to enable

observation of reality to find regularities, also causal relationships in collected data for understanding the phenomenon of intention to leave the organization.

The reason for choosing the ontology of the whole being, the objectivist epistemology, and the positivist philosophy, and no others was founded on literature review presented in the previous chapter, and aligned with the questions and research objectives of this research. It is important to mention that all studies supported this research, come from observed data in the real world, and from the search of regularities and causal relationships to get to generalizations, and propose new research approaches. Additionally, the reviewed studies were based on existing theories, from which the authors developed hypotheses that were tested and confirmed, or refuted, in whole or in part. The nature of this research is "descriptive and explanatory because is precursor to explanation" and it goes beyond mere "description and draw conclusions from the data you are describing." Description in this case is thinking "as a means to an end rather than an end in itself." (Saunders et al., 2012, p. 170, 171), and therefore the description is used as precursor of explanation. In this sense this research focuses on studying the impact of the moderator variable opportunity cost of the employee, in the relationship between extrinsic rewards and intrinsic rewards on employees' mobility intentions, from the perceptions of professors. Also, the relationships between extrinsic rewards, intrinsic rewards, and human capital on employees´ mobility intentions, taking into account, the perceptions of professors. And the decision of the activity that he/she would be dedicated to the future, if he/she expressed the intention to leave the University. This particular feature to consider the perceptions of professors oriented the decision to use a statistical technique, aimed explanation of the relationships and prediction of the criterion variables of the model, such as *PLS* (Pullman, Granzin, & Olsen, 1997). According to Henseler, Ringle & Sinkovics (2009) "another powerful feature of *PLS* path modeling in that

it is suitable for prediction-oriented research. Thereby, the methodology assists researchers who focus on the explanation of the endogenous constructs" (p. 282).

Therefore, because all the reviewed studies began with a theoretical framework, the researchers had to design a research strategy that allowed them to test the hypotheses, and when this happened, and data was available to solve the research questions, it was necessary to use the hypothetic-deductive approach. (Saunders et al., 2012). This method also required the researcher used a highly structured methodology, the concepts were operationalized to be measured, and to generate predictions about reality. In this sense, it was necessary first to contrast hypotheses with fact, later to reach a conclusion; and finally, it required the researcher to select carefully a sample that was representative of the studied population (Saunders et al., 2012).

On the other hand, literature review permitted to identify that the research strategy used by the authors which support this study was the survey strategy, and the questionnaire as a technique in each of the identified constructs namely: (a) extrinsic rewards (Campbell et al., 2012; Juma & Lee, 2012; Newman & Sheikh, 2012); (b) intrinsic rewards (Juma & Lee, 2012; Newman & Sheikh, 2012); (c) human capital (Martín, 2011); and (d) the opportunity cost of the employee (Greenberg & Spiller, 2015; Yip, 2014). Consequently, according to the philosophy of the research, the selected hypothetic-deductive approach, and the research questions of this study, the research strategy applied was the survey and used a questionnaire as a method to collect information. All sample interviewed answered the same questions, in the order, they are presented (deVaus, 2002).

The study time horizon was cross-sectional because it examined employees' mobility intentions, specifically University professors at a particular point in time. This study was not a longitudinal study in nature because it did not focus on studying change and development (Saunders et al., 2012). It is important to point out that ethical considerations of research

design guided the development of this study. Considering that the questionnaire could affect the response rate, as well as the reliability, and validity of collected data; therefore the selected questions come from reputable sources in the literature (Saunders et al., 2012).

Research Questions

According to scholars employees´ mobility intentions is the primary concern in professional services companies, the following research questions, critical in strategic management of human talent, try to find out: What extent variables like extrinsic rewards, intrinsic rewards, and human capital influence an employees´ intentions to stay or to leave the company he/she works for? Is there a difference in the decision-making of professor to stay or to leave the University for he/she works for, influenced by the moderating variable opportunity cost of the employee, taking into account his/her perceptions related to the extrinsic rewards and the intrinsic rewards that he/she receives? What types of professors are most likely to leave?

Research objectives

This research aimed to achieve the following objectives.

1. To identify whether professors´ perceptions about extrinsic rewards, intrinsic rewards and human capital affect their decision to stay or to leave the University.
2. To identify if the variable opportunity cost of the professor moderates both relationship between extrinsic rewards and employees´ mobility intentions, as well as intrinsic rewards and employees´ mobility intentions.
3. To identify whether professors choose to create new venture are those who earn the highest rewards and the best organizational support for human capital.
4. To compare the outcomes in items 3 and 4.

5. To know whether the model can explain the phenomenon employees´ mobility intentions.

Hypotheses

As a result of a revision of literature, this study develops the following theoretical proposal that contains the specific research hypotheses; these hypotheses are measurable proposals about the relationship between variables. According to the research questions the following hypotheses are stated:

Hypothesis 1: If the professor perceives has better extrinsic rewards, he/she is less likely to withdraw from the University.

Hypothesis 2: If the professor perceives has better intrinsic rewards, he/she is less likely to leave the University.

Hypothesis 3: If the professor perceives his/her University values human capital, he/she is less likely to withdraw from the University.

Hypothesis 4: Perceptions of opportunity cost of the professor moderate the effects between perceptions of extrinsic rewards and the likelihood of choosing to leave from the organization.

Hypothesis 5: Perceptions of opportunity cost of the professor moderate the effects between perceptions of intrinsic rewards and the likelihood of choosing to leave from the organization.

Hypothesis 6: Conditional on employees´ mobility intentions, professors with higher levels of extrinsic and intrinsic rewards, and professors who perceives that the University values human capital are more likely to create new venture than join to another organization (see Figure 2).

Population

The target population of this research consisted of professors of the faculties of the business administration working in from public and private universities in the Republic of Colombia, professors with a graduate degree in master's or Ph.D., and full-time employment contract. The last restriction facilitates and enhances the development of the study because it allows to include only professors, whose primary income depends on a single University, and professors at different stages of their working lives.

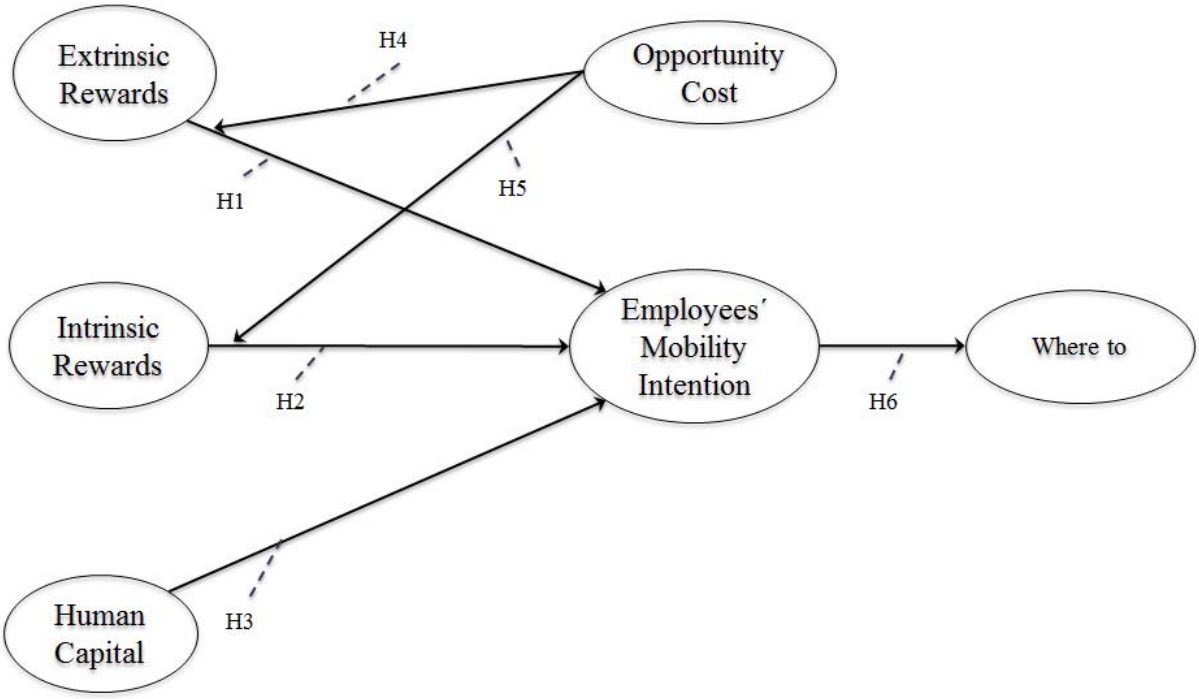


Figure 2: Hypotheses.

The population under study is made up of professors of business administration, contract full-time master's degree or Ph.D., who works in Universities, by the article 19 of Law 30 of 1992 of the Republic of Colombia; therefore, professional technical institutions and technological schools or universities are not included. The population is made up of the total number of professors of business administration programs that meet these conditions is approximately 2,739 people. Article 19 states that the Universities are currently recognized as such and institutions that prove their performance criteria of universality in the following

activities: Scientific and technological research; academic training in professions or disciplines and production, development and transmission of knowledge and universal and national culture. These institutions are also entitled to advance training programs in occupations, professions or disciplines, specialization programs, master's, Ph.D., and post-doctoral studies by this Law. These restrictions imposed on the population under study are supported on updated data provided by Sistema Nacional de Información de Educación Superior del Ministerio de Educación Nacional Nacional (MEN, 2016).

Sampling frame

The sample was for convenience and not random. Because the unit of observation of this research was the individual, the sample was taken from the defined population, according to the restrictions set. Professors from the Faculty of the business administration, working in public or private universities in Colombia with a full-time contract, and a graduate degree in masters or Ph.D. This selection reflects the interest of the researcher because it ensures a large group of professors linked through their work with universities in all, both public and private national geography. According to Barclay, Higgins, and Thompson (1995); Chin (1998b); Chin and Newsted (1999) when used *PLS,* the sample must be at least ten times higher than the higher of the following two options: the number of indicators that define the most complex construct, e.g., the number of observed variables containing the longest measurement model equation; and the number of records that point to the latent variable dependent on the more complex structural equation. The most complex construct from the model proposed is the intrinsic rewards; that has six dimensions which multiplied by 10 gives a total of 60 cases.

According to Hair, Hult, Ringle, and Sarstedt (2014) given that if it is considered that the maximum number of arrows pointing a construct in the model proposed is six. The minimum sample size requirements necessary to detect minimum R^2 values of 0.25 in the

proposed endogenous construct for this study in the structural model for a significance level of 5%, and assuming the commonly used level of statistical power of 80% and a particular level of complexity of the *PLS path model* is *N= 75.* (Cohen, J., 1992). The observed sample for this study *N= 131* fully complies with these requirements; it is representative of the population, and results can be generalized. The difference between the population studied and the selected sample avoids the possibility of a lower exploitation of the data.

Informed

Consent

Participants who answered the questionnaire were aware of the research objectives, and therefore their decision to participate was voluntary. The only incentive was offered was to make the results of this study available to institutions of higher education when they are published. Participants were informed of these conditions before responding the questionnaire. No questions identified participants or universities they work for. Participation was optional and confidential. Neither rewards nor benefits were offered. The informed consent form that participants received is presented in Appendix A.

Confidentiality

The invitation to answer the questionnaire was made publicly, and a letter was delivered to each participant. It emphasized the confidentiality of the information to be provided in the letter; the objectives were explained, volunteer participation was manifested, and participants expressed their informed consent at the time of filling out the questionnaire. There was no registration of participants. In order to ensure the confidentiality of information provided by respondents, the questionnaire did not ask about the identity of the professor or the University where she works, at any time during the application.

Geographic Location

The study was conducted with employees of public and private Universities in Bogotá, who work as professors, and they may have administrative positions.

Data Collection

The questionnaire was applied to University professors working in public and private universities in Colombia, specifically in the faculty of business administration. The questionnaire was applied in a national research conference aimed at professors from the faculties of business administration, from public and private universities across the country. This congress was organized and developed by Universidad del Valle, public, and Universidad Externado de Colombia, private, 23 to 25 November 2015 in Bogotá.

Filling out the questionnaire took less than ten minutes, and when the participant completed it, he/she voluntarily gave it to the person designated to collect it. No audio recording or video was made. The questionnaire emphasizes that participation was voluntary, as well as communicating to participants about the objectives of the study. At all times the principles of voluntary participation and confidentiality were maintained.

Instrumentation

The questions proposed in the questionnaire are grounded in reviewed literature. Questions used in this research were adapted in such a way, that allowed the respondent to perceive the specific features in each of the dimensions and the proposed constructs, to evaluate their greater or lesser degree of presence using a seven-point Likert scale (Eisenberger, Huntington, Hutchinson, & Sowa, 1986). The wording of the questions, the order of presentation, and the sequence thereof, since the introduction of the questionnaire to the end, had an approach that allowed the respondent to identify, not only his/her preferences in each of the proposed items, but also his/her neglected opportunity cost, as suggested by Greenberg and Spiller (2015); and prepared the respondent to make his/her choice, whether to

stay or to leave the organization he/she works for. In the initial phase of the implementation of the research design, the questionnaire was reviewed by experts in the field of human resources, and checked the relevance and clarity of measurements. Five focus groups validated the questionnaire. No personal questions to identify respondents or University they work for will be made. People involved in the processing of the questionnaire do this optionally and confidentially. No rewards or related benefits regarding the processing of the questionnaire will be offered (Bontis & Serenko, 2007).

After selecting the sample under study, the next step was the development of a questionnaire to collect the scales of measurement of variables proposed research model. Subsequently, it carried out the process of gathering information to obtain data from individuals under study. The final design of the questionnaire required an extensive review of the literature, which allowed selecting appropriate measurement of the constructs proposed in this study questions. In order to validate the questionnaire: (a) initially a first exploratory questionnaire was administered in five different sessions involving a total of 33 University professors in five different working sessions, focus group; all professors answered all questions and helped to improve the questionnaire; (b) in a second stage, the researcher met with two professors, experts from the Faculty of Business Administration of Universidad Externado de Colombia, who reviewed each of the questions proposed for the validation exercise questionnaire, this activity allowed to adjust the items to the public objective. In Appendix D is a brief explanation of the adjustments made to the questionnaire. The experts consulted were professors of business management linked with different public and private universities in Bogotá; it was considered appropriate that among the professors who collaborated on the validation of the questionnaire had academic experts: in research techniques, in human talent management, in business management, and with experience as entrepreneurs. This process of reviewing the questionnaire initially presented to different

groups for validation allowed not only collect the recommendations of the experts, but also submit the results to statistical tests of reliability, construct by construct; and then, it proceeded to incorporate the adjustments in the final version of the questionnaire. The questionnaire developed is composed of five blocks representing the various dimensions associated with each of the constructs of the model. In the first block, the respondent completed the information related to the control questions. In the second, third and fourth block, the respondent stated in the proposed scale, their perceptions regarding external rewards and internal rewards received, as well as perceived organizational support for human capital, taking into account the intellectual capital, the social capital and the affective capital. In the last block, the respondent used the same scale that measured their intention of staying or leaving the University he/she works for; as well as identifying the type of organization to which his intentions would be addressed: business creation or linking to another company. The following explains each of these blocks. The questionnaire with questions used is not included in this study because the researcher has permission to use and not for publication. The questionnaire was officially translated from English into Spanish; equally throughout the doctoral dissertation was translated from Spanish into English by an official translator certificate, (see Appendix C). Some authorizations for use the instruments are in Appendix B, other instruments don´t need permission because they are for free (e.g. Job Diagnostic Survey). The questionnaire included the following items which are the dependent and independent constructs. The questionnaire consists of 60 questions distributed as follows; 10 questions for the construct related to extrinsic rewards, 18 questions related to the construct intrinsic rewards, 17 questions related to the construct human capital, five questions for the construct related to employees' mobility intentions; also they included questions related to control variables. In the implementation phase of the questionnaire, participants have explained the basic purposes of the study. And ten questions for moderating variable

opportunity cost, taken from the control variable, according to Nicolaou & Souitaris (2015). Each of the questions are supported in the literature. Below they are identified by each construct. The exogenous and endogenous construct were measured with the seven-point Likert scale ranging from 1 (“strongly disagreed”) to 7 (“strongly agreed”).

The construct extrinsic rewards was operationalized in four dimensions: working conditions, pay satisfaction, satisfaction with fringe benefits, and promotion opportunities (Mottaz, 1988). Working conditions was measured with two items scale developed by Malhotra et al. (2007), and adapted for this study. Pay satisfaction was measured with the scale developed for this study, and used by Boshoff and Allen (2000), and the Job Satisfaction Survey developed by Spector (1997). Satisfaction with benefits was operationalized and measured with a scale of two items designed by Spector (1997) in his Job Satisfaction Survey. Promotion opportunities were operationalized using a scale of four items adapted for this study from the scale of two items used by Mottaz (1988) and Young et al. (1998), and adapted for this study specifically those that mention University. The questions used the seven-point Likert scale to measure the perception of the professor in relation to: (a) working conditions: “working conditions (lighting, hygiene, ventilation, noise, privacy, etc.) are appropriate,” and “I am satisfied with working conditions (workplace, lighting, ventilation, noise, privacy, etc.) in my workplace”; (b) pay satisfaction: “I am satisfied with the amount of pay I receive for the job I do,” and “I feel I am paid fairly considering the work I do”; (c) satisfaction with benefits: “I am satisfied with the fringe benefits package. (Food stamps, transportation, education support, prepaid health, etc.)”; and “I am rewarded by my boss for doing my job well”; this question was aggregated here because it forms part of external rewards; and (d) promotional opportunities: “I know promotion policies of the University where I work,” “I feel that promotion policy is good,” “I feel that opportunities for

advancement are articulated with promotion policies," and "the University where I work gives me great promotion opportunities."

The construct intrinsic rewards was operationalized in six dimensions: role clarity, participation in decision making (Glisson & Durick, 1988; Singh, 1998); skill variety, autonomy, feedback (Hackman & Oldham, 1976); and training (Armstrong, 1993). Role clarity was measured using four items adapted from Rizzo, House and Lirtzman´s scale. (1970). Participation in decision-making was measured using three items adapted from a modified version of Vroom (1963) and adapted by Teas et al. (1979). Autonomy was measured from three items adapted from Diagnostic Job Survey designed by Hackman and Oldham (1976) and later used by Teas (1983) and Singh (1993). Feedback was measured with a scale of two items developed by Malhotra et al. (2007), and based on Hackman and Oldhams´ scales (1976) and Young et al.´s scales (1998). Skill variety was measured from three items adapted from Diagnostic Job Survey designed by Hackman and Oldham (1976) provided in Huczynksi and Buchanan (2001) and adapted for this study. Training was measured by the scale of three items generated Boshoff and Allen (2000) and adapted for this study specifically the question related to students. The questions were presented in the following order in the questionnaire and also used the seven-point Likert scale to measure the perception of the professor about : (a) role clarity: "Clear planned goals/objectives exist for my job," "I know exactly what is expected of me in my job," "I know how my performance is going to be evaluated," "I know what my responsibilities are"; (b) skill variety: "My job allows me to use all my skills and talents," "My job allows me to create complete and more meaningful experiences," and "My expectations of growth are reflected in the development of more complex jobs within the University"; (c) autonomy: "My job allows me to use personal initiative in carrying out the activities," "My work gives me the opportunity to act freely in the way I do it," and "I am free to act freely and responsibly in my work to achieve

the objectives"; (d) feedback: "My boss gives me feedback about how well I'm doing my job," and "I receive recognition from my boss for doing my job well"; (e) training: "I receive periodic induction before contact with students (at least twice a year)," "I receive continued training to provide a good job," and "I receive regular training to keep me updated and provide a good job"; (f) participation in decision-making: "I can influence decisions of my boss regarding things in my job," "My boss asked my opinion when problem comes up," and "I feel it is easy to get job improvement ideas across to my boss."

The construct human capital was operationalized in three dimensions: intellectual capital, structural capital, and affective capital. Intellectual Capital was measured with a five items scale adapted from Youndt and Snell (2004). The following sentence was used as the header of the questions: "University can maintain stably to ...," and the five options were: " … highly qualified professors," "... the best professors in our sector," "... the creative and brilliant professors," "... experts and competent professors in their jobs and functions," and "... professors who develop new ideas and knowledge." Social capital was measured by a scale adapted from six items of Youndt and Snell (2004), and Collins and Smith (2006). The following sentence was used as the header of the questions: "At the University is common for professors …," and the six options were: "… to combine and exchange knowledge to solve problems or create opportunities"; "… to share their own ideas to present or propose new ideas, products or services"; "… to collaborate with each other to diagnose and solve problems"; "… to share information and learn from each other"; "… to interact and exchange ideas with staff from other areas"; and "… to apply knowledge of an area of the company to resolve problems in others." Affective capital was measured with a six items scale from: Collins and Smith (2006); Mayer, Davis, and Schoorman (1995); Meyer & Allen (1997); Rhoades, Eisenberger, and Armeli (2001); Robinson and Rousseau (1994); Thompson and Heron (2006); and Tzafrir, Baruch, and Dolan (2004). The following sentence was used as

the header of the questions: “Professors…”: “…have a strong sense of belonging to the University”; “… consider that the University has a great sense and personal value to them”; “… consider as their own the problems of the University”; “… consider that the University treats them just”; “… feel that the University is honest, sincere and trust her”; and “… feel that there is consistency between what the University say and do.”

The construct employees´ mobility intentions was measured using three items from the scale used by Colarelli (1984). The scale includes the following three items: “I frequently think of quitting my job”; “Probably I look for a new job next year”; and “As soon as possible I will leave the University.” The construct “where to” was measured using one item: “If you get to withdraw from the University where you currently work, which of the following options would choose in the first place?” The item was measured using a nominal scale (create new venture= 1, joint to another organization= 2).

The construct opportunity cost of the professors were measured in the following ten items (Nicolaou & Souitaris, 2015): gender and position (Chen & Aryee, 2007); marital status (Ismail et al., 2011); work experience (Choi et al., 2012); organization status (Juma & Lee, 2012), assimilated as institutional accreditation (Consejo Nacional de Acreditación, 2006, Noviembre) and public or private University (Ley 30, 1992); age and organizational tenure (Choi et al., 2012; Yi-Ching et al., 2012); higher education level (Yi-Ching et al., 2012); the number of articles published in professional journals (Universidad Nacional de Colombia, 1999); for salary (Campbell et al., 2012; Ward, 2009); and type of contract (Decreto-Ley 2663, 1950; Gilder, 2003; Khan, Shahzad, Ullah, Khan, & Wasim, 2012). These control variables were measured using a nominal scale. For gender (male = 1, female = 2); for position within the University (Professor/Researcher = 1, Coordinator/Director = 2, Dean = 3); for marital status (single = 1, married = 2, widowed = 3, divorced = 4, cohabiting = 5); for work experience (1 to 3 years = 1, 3 to 5 years = 2, 5 years or more = 3); for

institutional accreditation (yes= 1, no= 2); for organization status (public = 1, private = 2); for age (21-30 years old = 1, 31-40 years old = 2, 41-50 years old = 3, and 51 years old or more = 4); for organizational tenure (1 to 3 years =1, 3 to 5 years =2, and 5 or more years = 3); for higher education level (specialist = 1, master = 2, and Ph.D. = 3); for number of articles in the last year; for salary in millions of COP (1-3 = 1, 3-5 = 2, 5-8 = 3, 8-10 =4, more than 10 = 5); and for type of contract (permanent = 1; fixed-term = 2).

Validity and Reliability

The main issues to consider ensuring the validity and reliability of the proposed study were as follows.

Internal validity

The validity and reliability of collected data and the response rate depends on the design of the questionnaire, the structure, and rigor of pilot test. Therefore the validity of the questionnaire was subject to the content validity criteria, criteria validity, and constructed validity (Blumberg, Cooper & Schindler, 2008). Regarding content validity Saunders et al. (2012) suggested two ways. The first one is related to a careful research definition considering reviewed literature, after discussion with the experts. Second way consists of performing a preliminary validation questionnaire exercise with a group of individuals, to assess if each question in the questionnaire is easy to understand, if it is useful and if it is necessary for the study or not. In this regard, the questionnaire used in this study was submitted to these two content validity criteria, as stated above five validation exercises were conducted in five sessions of a focus group, in order to assess about each question if it was easy to understand, if it was useful and if it was necessary for the exercise. Also carefully it reviewed the related literature and discussed with experts from the center of organizational development and human talent of the Universidad Externado de Colombia; as a result of these two exercises, the questionnaire applied was improved.

According to Saunders et al. (2012), the concept of predictive validity of a question is related to the ability of each question to make accurate predictions. This means that the questions used in the questionnaire should be useful for predicting the future behavior of professors who leave the University; therefore, the test criterion validity shows the extent to which questions can predict the employee's intention to leave the higher education institution. The validity criterion was evaluated comparing the data obtained with the specific content of the question. This comparison was performed using statistical analysis such as correlation (Saunders et al., 2012). "The validity of the construct refers to the extent to which questions measure what [the researcher] try to measure. This term is used when it refers to constructs such as attitude scales, aptitude and personality and similar ones" (Saunders et al., 2012, p. 430), and therefore applies to the present study because it evaluates the perception of University professors in the constructs proposed in the research model.

Related to the concept of predictive validity, the *Pearson's correlation* between extrinsic rewards and employees´ mobility intentions showed a negative and good correlation (-0.6348). The p-value showed that there was a significant correlation in all questions because p-value was 0.0000 less than the level of significance $\alpha < 0.05$. According to these outcomes questions proposed for extrinsic rewards measure what the researcher try to measure.

The *Pearson´s correlation* between intrinsic rewards and employees´ mobility intentions showed a negative and moderate correlation (-0.5792). The *p-value* showed that there was a significant correlation in all questions because *p-value* was 0.0000 less than the level of significance $\alpha < 0.05$. According to these outcomes questions proposed for intrinsic rewards measure what the researcher try to measure.

The *Pearson´s correlation* between human capital and employees´ mobility intentions showed a positive and high correlation in all dimensions (0.6629). The p-value showed that

there was a significant correlation in all questions because *p-value* was 0.0000 less than the level of significance $\alpha < 0.05$. According to these outcomes, questions proposed for extrinsic rewards measure what the researcher try to measure.

External validity

"The extent to which the research results from a particular study are generalizable to all relevant context" (Saunders et al., 2012, p. 671). In this sense, the external validity of this study reaches a level of national generalization, applicable to those who work as University professors in any higher education institution in Colombia, because the regulatory framework for the type of contract is the same nationwide. Therefore, for obvious reasons researchers who wish to replicate this research in other parts of the world can get different results, it is due to the diversity of labor policies, business practices, and cultural values in other countries.

Reliability

It refers to the coherence of the proposed model. Reliability measurement in this study will be performed by calculating *Cronbach's alpha* coefficient for each construct. This criterion is the most widely used in research. When *Cronbach's alpha* increased to 0.7, it indicates an adequate level of reliability for a construct (Mitchell, 1996). The results were: extrinsic rewards (0.9086), intrinsic rewards (0.9185), human capital (0.9028), employees´ mobility intentions (0.9141), and opportunity cost (0.8721). These results show that there is a relationship between the manifest variables, and there is no obvious high multicollinearity. According to Chin (1998), all the blocks were considered homogenous, i.e. the *Dillon-Goldstein's rho* is always larger than 0.7. The inspection revealed that all the *t-values* are significant at the 0.000 level, this demonstrated that all indicators effectively measured the construct to which they belong, as above mentioned. According to with these outcomes, there is an adequate level of reliability for each construct.

Data Analysis

The current dynamics of the world is complex, humanity live in a multivariate world, and hence the fact of recurring to study the impact of one or two hidden variables may seem artificial and inconsequential (Jacoby, 1978). Indeed, according to Haenlein and Kaplan (2004) the risk arises when performed simple analyzes, that do not take into account real situations, especially when a person wants to research the effect of moderator variable on the relationship between the independent variables and the dependent variables. It also includes the decisions that could be made according to the purpose of this study. For this reason, the first generation statistical techniques are limited because they can only be applied in different conditions from the observation of dynamics of the real world. Therefore, they offer simple model structures to explain such world, and they do not consider the possibility that in the studied phenomenon exist random or systematic errors (Haenlein & Kaplan, 2004). The random error, according to Heeler and Ray (1972) is caused, for example by the order of the questions in the questionnaire that is presented to study participants, and could cause fatigue in them. The systematic error could be produced, for example, by measuring the variance of a variable, when it is attributed to the measurement method, and not to what has to be measured (Bagozzi, Yi, & Phillips, 1991). This type of limitations generated the emergence of second generation techniques such as *Structural Equation Modeling and Partial Least Squares* that analyze the real world as it is presented, and then produce more complex models of relationships between multiple dependent and independent variables (Gefen, Straub, & Boudreau, 2000). It is the case of the present research. It is not a simple model. It expressed two important relationships, first between the independent variables on the dependent variable; and second, the moderating effect of opportunity cost of the employee between the rewards, extrinsic and intrinsic, on employees´ mobility intentions.

According to McDonald (1996) in the second generation statistical techniques, the models are not invulnerable to random or systemic errors, and not all variables are strictly observable. In this regard, this author stressed that a variable could be called observable "if and only if its value can be obtained by means of a real-world sampling experiment." (p. 239).

One of the methods that are part of the second generation statistical techniques is *partial least squares (PLS),* another is *structural equation model (CB-SEM).* These two statistical methods have two different approaches with substantial differences. *CB-SEM* has enjoyed wide acceptance in the field of social sciences, including the development of different software; *PLS* is a technique less widely used and more recent development. According to Hair et al. (2010) *CB-SEM* "can examine a series of dependence relationships simultaneously. It is particularly useful in testing theories that contain multiple equations involving dependence relationships." (p. 630).

Motivation for using *PLS path modeling* on *CBSEM* in this study: "The *PLS* parameter estimates better reveal the strength and direction (i.e., positive vs. negative) of the relationships among variables compared to correlation coefficients" (Calantone, Graham, & Mintu-Winsatt, 1998, p. 28). "The researchers´ focus is placed on the explanation of an endogenous construct" (Festge & Schwaiger, 2007, p. 192). "*PLS* is most appropriate when simple sizes are small, when assumptions of multivariate normality and interval scaled data cannot be made, and when the researcher is primarily concerned with prediction of the dependent variable" (Birkinshaw, Morrison, & Hullan, 1995, pp. 646-647). "Parameters can be estimated independent of sample size… *PLS* provides the most flexibility regarding measurement of the constructs" (Graham, Mintu, & Rodgers, 1994, pp. 79-80). Given that the purpose of this study is to predict the employees´ mobility intentions of the University professors, *PLS* has thus been chosen as the *structural equation modeling* approach… The

data do not have to be multivariate normal because of the fixed point estimation" (Green & Ryans, 1990, p. 53). "All relationships are modeled simultaneously, eliminating concerns about *multicollinearity*" (Inkpen & Birkenshaw, 1994, p. 208). "Less stringent assumptions about the randomness of the simple and the *normality* of the distribution of variables" (Johansson, & Yip, 1994, p. 587). "*PLS* avoids many of the restrictive assumptions imposed by other causal models that involve latent variables such as *LISREL*" (Lee, 2000, p. 196). "*PLS* is a more rigorous approach … compared to correlation and regression analyses … *PLS* minimizes biases associated with … dichotomous and ordinal measures" (Mintu-Wimsatt, & Graham, 2004, p. 352). "*PLS* allows … a simultaneous analysis of both whether the hypothesized relationships at the theoretical level are empirically acceptable, and also hos ell the measures relate to each construct" (Pavlou, & Chai, 2002, p. 246). The predictive interest of this study is consistent with the objectives of *PLS* ... "explanation of the relationships and prediction of the criterion variables of the model" (Pullman, Granzin, & Olzen, 1997, p. 221). "The regression based approach of *PLS* is considered more appropriate than covariance-based methods such as *LISREL* … applicable when a multivariate normal distribution cannot be assured" (Venaik, Midgley, & Devinney, 2005, p. 665). "*PLS* path modeling is methodologically advantageous to *CBSEM* whenever improper or non-convergent results are likely to occur … Furthermore, with more complex models, the number of latent and manifest variables may be high in relation to the number of observations" (Henseler et al., 2009, pp. 288-289). Another important reason for not to use *CBSEM* in this study resides in the sample size, there are considerable obstacles faced when conducting *CBSEM* with small samples. Boomsa and Hoogland (2001) provide evidence that *CBSEM* requires several hundred or even thousands of observations. Instead *PLS* works well with small samples, because it is based on *OLS regressions,* and generally achieves high levels of statistical power (Reinartz, Haenlein, & Henseler, 2009).

On the contrary, because *CBSEM* has limitations on the number of observations and small sample sizes, often it leads to statistical bias in testing (e.g., Hu & Bentler, 1995), as well as unacceptable solutions (e.g. Heywood cases). "Thus *PLS* is suitable for applications where strong assumptions cannot be fully met and is often referred to as a distribution-free soft modeling approach" (Hair et al., 2010, p. 416). But nevertheless, "*PLS* does not provide researcher with a magic bullet for achieving adequate statistical power at small sample sizes" (Goodhue, Lewis, and Thompson, 2006, p. 10), then researchers must ensure that the sample size is large enough to support the conclusions (Henseler et al., 2009).

According to Henseler et al. (2009) "If the premises for the application of *CBSEM* are violated, such as regarding the required minimum number of observations for robust model estimation or the multivariate normality assumption for some *CBSEM* discrepancy functions, the *PLS* approach offers robust approximations" (pp. 295-296). This study is not interested in explaining covariance, because high covariance does not imply causal effect; while the "*PLS* approach is adequate for causal modeling applications whose purpose is prediction and / or theory building" (p. 297), and therefore, *PLS* explains causal effects. The objective to *CBSEM* is to explain *covariation* among all indicators, instead *PLS* to maximize the explained *variance* of all dependent variables, it can support the objectives aimed at prediction. Because, *PLS* "estimates latent variable scores as exact linear combinations of their associated manifest variables" (Hair et al., 2010, p. 415, citing Fornell and Bookstein, 1982) "and treats them as perfect substitutes for the manifest variables. The scores thus capture the *variance* that is useful for explaining the endogenous latent variable" (Hair et al., 2010, p. 415). It is in line with the central objective of this study as explained above. For this study *PLS* was chosen over techniques based on *covariance,* such as *CBSEM,* because *PLS* sets fewer restrictions on the distribution and *normality* of data, and "in general *multicollinearity* does not affect the indices" (Esposito et. al, 2010, p. 275). "*PLS* is a

descriptive approach that does not hinge upon [the] use of formal model fit statistics, which is mainly due to the assumption of distribution-free *variance.*" (Abd-El-Fattah & Abdulrahman, 2012, p. 433; Hulland, 1999). For this statistical test, the significance level α is at 0.05. Finally, because "*PLS path modeling* may represent a reasonable methodological alternative for theory testing" (p. 297), it is plausible use this statistical technique for this study.

PLS provides a *correlational* evidence which is to identify the effect of causality of a set of exogenous latent variables, on a single endogenous latent variable. It structure is *correlation* and causality because it seeks to measure the effect of exogenous variables on the endogenous proposal variable, to explain the behavior of the latter, which in turn is described by the *goodness of fit* and the *determination coefficient* R^2. The study seeks to identify the *correlation* of constructs, and no apparent *correlation* of variables. Therefore, the best technique to model *correlations* of constructs are structural equations; and the arguments presented above *PLS* is more flexible than *CB-SEM.*

This study sought to maximize the ability to explain the variance of the dependent variable employees' mobility intentions, as if it were a linear regression; this amounts to minimize the prediction error of this variable, for this reason, among others, the methodology of this study applies a partial least squares estimation (Rodríguez-Pinto, 2008). In this sense, it is oriented to the prediction approach, which is also useful for the development of new theories that are not known all relevant variables and their interrelationships accurately, as it identifies the existence of relations yet not included (Martín, 2011). Therefore, *PLS* is less affected by the problem of lack of specification or omission of a relevant variable, because it has less influence on the estimated elsewhere in the model parameters (Chin, 1998a, 1998b; Chin & Newsted, 1999; Gefen et al., 2000). Rodríguez-Pinto (2008) summarized the main differences between *structural equation models* based on *covariance* and based on *partial least squares* approach. He pointed out the differences in the statistical assumptions related to

the focus, the types of scales, the requirements of sample size, the predictive or explanatory-causal purpose, the relationship between observable and not observable variables, and the complexity of the model (see Table 1).

No doubt, both *CBSEM* and *PLS* are robust methods of analysis. The differences noted and the arguments presented allow better understand the reasons why *PLS* was preferred as statistical technique. Following, Martín (2011) *PLS* does not require a distribution of frequencies, it allows working with observed and unobserved variables that do not follow a normal distribution; thus “traditional parametric-based techniques for significance testing / evaluation would not be appropriate" (Esposito et al., 2010, p. 659). It estimates measurements and structural parameters through an iterative procedure, which combines simple and multiple regression by ordinary least squares; also, *PLS* works segmenting and analyzing the constructs models separately, and thus, it is less affected by the size of the sample or the frequency distribution of the variables (Barclay et al., 1995; Gefen et al., 2000). It is procedure is the *bootstrap* approach, it is particularly suitable in cases where the data do not follow a *normal* distribution; indeed, it is common to most of the measures commonly used in the behavioral sciences (Micceri, 1989). Therefore, due to the nature of *PLS*, where the model parameters are estimated by blocks, *PLS* requires a sample size much smaller than *CBSEM* (Martín, 2011, p. 249).

Regarding the consistency of estimators in the methodology *PLS* the manifest variables are transformed into latent variables; it means that *factor analysis* strengthened the analysis going on qualitative analysis to quantitative analysis allowing further adjustment of the least squares regression; and the model was tested yielding a setting determination *(R^2)* and moderate statistical significance, *p-value* (0.0000).

Previously it noted that the fundamental objective of *PLS* is to minimize the prediction error; about this research seeks among others to identify the constructs that

contribute most to the intention to leave the organization, so this technique seems appropriate to explain the influence on the construct dependent on the model proposed. Given that *PLS* excels in its flexibility regarding the metric that does not presuppose a distribution of specific frequencies, the constructs of this model, both exogenous and endogenous, were measured with a seven-point Likert scale, and they cannot be considered strictly as continuous sense, and not all data exceeds multivariate normality tests. So that, an analysis based on *covariance* is problematic in this context, especially bearing in mind the model complexity (Martín, 2011).

Table 1

Differences between CBSEM and PLS

Criteria	CBSEM	PLS
Objective	Oriented approach to estimating model parameters based on the *covariance* between the observed variables.	Oriented prediction approach based on the *variance* of the dependent variables.
Requirements variables	Usually it requires working with data measured with continuous scales and follow a multivariate distribution.	Supports any type of scales and assumes no particular distribution.
Types of constructs	Generally only it supports constructs measured with reflective indicators.	It supports both constructs measured with reflective indicators as training.
Parameter estimation	Emphasis on the accuracy of the estimated parameters.	Little emphasis on individual parameters. Its consistency increases as the number of indicators and the sample size increases. The stability of the parameters determined by resampling procedures.
Sample size	The estimation with small samples is problematic. The sample size required increases with the complexity of the model and the data were not normally distributed.	It can estimate models with very small samples. The minimum size depends on the number of variables containing the measurement equation or complex structural equation.
Model complexity	The estimation of very complex models poses problems for the absence of *degrees of freedom* and their possible overshooting.	By definition, no adjustment indices. The accuracy of the model is determined by its ability to explain the dependent variables.

In order to identify groups of professors who are more like each other than with members of other groups, cluster analysis, to characterize the sample studied in each of the evaluated hypothesis was performed. Appendix F. "This type of analysis examines a set of interdependent relationships, and does not distinguish between dependent and independent variables, but examines the interdependent relationships between the full set of variables. Its

main objective is to classify objects in more or less homogeneous groups based on the set of variables and objects different from other groups" (Malhotra, 2008, p. 635).

Structural model

The proposed structural model, called inner model in *PLS* describes the relationship between the constructs and the measurement models, which describe the relationships between the constructs and their measures (Hair et al., 2014). The structural model presented in Figure 1 illustrates the types of constructs and the relationships. The extrinsic rewards, intrinsic rewards, and human capital are an independent (exogenous) variables. The employees´ mobility intention is a dependent (endogenous) variable. The opportunity cost of the professor is the moderator variable. About this proposed structural model it is important to say that employees´ mobility intentions in different studies are an endogenous variable because it is a consequence of several competing alternatives to predict it. About this, Hair et al. (2014) said that researchers must use their best judgment to determine the sequence, and select it can be challenging. For this reason, the researcher found in the literature review a structural model of similar complexity to that proposed in this study, and further found that he used a statistical technique *PLS,* this model was to Bontis and Serenko (2007). These scholars conducted a study whose purpose was to propose and test empirically a model that explained the capabilities of employees from a knowledge-based perspective, using management practices of human capital as moderating variable and *PLS* statistical technique to analyze data. Following Bontis and Serenko (2007) this study tried to propose and empirically test a model that explained the employees' mobility intentions from a perspective based on the interaction of predicting variables, using as moderator the opportunity cost of the employee. According to Bontis and Serenko (2007) a size of effect test series will be carried out, to research the predictive power of predicting variables; and to achieve this, each

independent variable from the model was eliminated gradually, and then the model was recalculated, registering *R-squares.*

Moderator variable

Sharma, Durand and Gur-Arie (1981) suggested that it was necessary to identify the moderating variable, and to achieve this, it was a need to establish whether there was a significant relationship between the predictor's variables described above and the employees´ mobility intentions, moderated by the opportunity cost of the employee. In this regard, *PLS* allowed testing the effects produced by the interactions of variables, without making assumptions of multivariate normality. Hair, Ringle, and Sarstedt (2013) warn that when *PLS* is used with moderating variables is important to note, that "one may first estimate and evaluate the main effects in the *PLS path model,* and, in subsequent moderator analysis, include the product term and its interaction effect to avoid the common mistake of confounding main and simple effects" (Hair et. al, 2013, p. 3); in this sense, they also suggested consider using orthogonalization. It is important to note that the moderating effect of the opportunity cost of the employee was categorical, this means that it serves to divide the sample into sub-samples, and allows comparisons and find if there are significant differences between subsamples. Because the primary objective of the study was to assess the moderating effect of the opportunity cost of the professor about the decision to leave the University, through extrinsic rewards and intrinsic rewards. The nature of the manifest variables that make the opportunity cost of non-metric type, therefore it is impossible to measure through continuous variables items as gender, the level of study, position, type of contract, etc. obviously are categorical. However, they were sought for ordinal categorical in the same direction. In this way, there is no loss of information.

Summary

Following the positivist paradigm, the advisability of conducting a quantitative study was identified in this study selecting the survey as a research strategy in a cross-sectional time horizon, and using *PLS* as a statistical technique to propose and empirically test a model, that explains employees' mobility intentions from a perspective based on the interaction of the following constructs: extrinsic rewards, intrinsic rewards, and human capital. In this study, the opportunity cost moderates two relationships. First, between extrinsic rewards and employees´ mobility intentions. Second, between the intrinsic rewards and employees´ mobility intentions.

The population consists of professors of the faculty of business administration from public and private universities in Colombia (Ley 30, 1992, art. 19), with a full-time contract, and a graduate degree in masters or Ph.D. The sample size consists of 131 of these employees who work as University professors. Consequently, people are the unit of analysis in this study. Participants in the study were given a questionnaire that they will answer voluntarily and with previous consent; those involved will be guaranteed confidentiality. All other necessary validity and reliability aspects were considered to ensure the predictive power of the proposed study.

Data analysis were performed using the *PLS* statistical technique considered in previous studies, because it was very robust and adequate for the execution of studies exploring satisfaction, in this case of employees who work as University professors. This decision on the statistical technique is also based on the literature.

Chapter 4: Results

The purpose of this chapter is to report, in sufficient detail, the results of the statistical procedures. The purpose of this quantitative study was to analyze the factors that influence employees' mobility intentions, and subsequent decisions to leave the firm, from a perspective based on the moderation of opportunity cost of the employee on the relationship between extrinsic rewards and employees´ mobility intentions, and between intrinsic rewards and employees´ mobility intentions. Predictors of employees´ mobility intentions used in this study were extrinsic rewards, intrinsic rewards and human capital. The perception that the professor has about the predictors, influence his/her intention to stay or not in the University, and in turn claims the opportunity cost of the professor. The results of data were organized around the research questions and hypotheses, and they were presented in the following sequence.

Data Collection Procedures

The questionnaire was applied to University professors working in public and private universities in Colombia, specifically professors from the faculty of business administration. The professors´ surveyed sample was taken in two national events. First, the "National Congress of Researchers in Management 2015" from November 23th to 25th, 2015. Congress attended by professors of the faculties of business administration from public and private universities of 18 departments of Colombia. Second, the "Annual Meeting of Directors and Deans of Business Administration" on December 4th, 2015, attended by 30 deans and directors of faculties of business administration from public and private universities. The first event was organized by a public University and a private University in Colombia; and the second event was organized by the Colombian Association of Faculties of Business Administration (Ascolfa). Importantly, a probabilistic methodology was used in the selection of the sample, which will also provide the representation of it. In this way, they were taken:

large samples of large departments, medium samples of medium departments, and small samples of small departments.

The questionnaire was delivered personally to each of the respondents, and later the researcher presented to all participants the objective of the research, with an emphasis on confidentiality, and the academic nature of the investigation. Also voluntary participation is also highlighted, the non-identification of the respondent or the University to which he/she belonged, reporting that the professor had the power to make the decision to complete, and then deliver it to the persons designated to collect it. A sample of 169 University professors answered and delivered the questionnaire; 131 were usable questionnaires (77.51%). Table E1 in Appendix E shows the characterization of respondents from the control questions.

Respondents professors developed the questionnaire in classrooms, in an environment free of pressure and noise; the time taken to complete it ranged between 8 to 10 minutes, after which they were asked to deliver people of logistical support.

The pilot questionnaire was applied to 33 professors in five focus group sessions. People who answered the pilot were professors of areas such as human resource management, finance and information management, marketing, production and leadership. After collecting the questionnaires were evaluated according to Bell (2010): (a) how long it took you to complete the questionnaire? the average ranged from 7 to 10 minutes; (b) the clarity of the instructions about respondents said that if they were clear and that it was necessary to explain the purpose of the investigation; (c) if the questions were unclear or ambiguous, most respondents said they were clear and some respondents stated that questions related to human capital ambiguity arose, why it was necessary to review them with two experts and changed for items considered by them as more relevant; (d) if the questions did feel uncomfortable, about this professors said they felt watched as people and that the University wanted to make improvements to increase welfare; (e) if a main topic was omitted in your opinion, to what

respondents expressed the need to clarify what additional incentives were; (f) if the design was clear and attractive, the respondents said the questionnaire was long and it was necessary to improve the design; and (g) if they had any other comments, in this regard they stated that the "uncertain" option could be taken as "do not know" or "not applicable me" and suggested changing it. In a second stage, as was explained above, the researcher met with two professors, experts from the faculty of Business Administration of Universidad Externado de Colombia, who reviewed each of the questions proposed for the validation exercise questionnaire, this exercise allowed to adjust the questions to the public objective. As a result of the two validations of the instrument they took into account the recommendations of respondents and experts.

At the mentioned congress questionnaires were collected by three students of undergraduate program of business administration from Universidad Externado de Colombia, specifically assigned to this task and by the researcher; and in the meeting of deans and directors the questionnaires were collected by the researcher.

As mentioned above 169 University professors answered and delivered the questionnaire and 131 were usable questionnaires. Only cases with complete information on the set of variables were analyzed. It is important to note that the respondents answered 50 questions in addition to the priority control information. In this sample, there was no lack of information so that the effect of missing information was not an influential factor in the study; and consequently there was no need to remove and not to impute empty cases.

Data Analysis Procedures

The first estimate consisted of validating the questionnaire and *Cronbach's alpha*, and the results presented in Table E1 for each of the evaluated constructs allowed to confirm the validity of the instrument used. According to the approach presented in Chapter 3 about the *PLS* statistical technique that was employed in this study, it explained that it is an estimation

procedure based on components that extend to situations with more than one block of variables (Wold, 1975a). Esposito et al. (2010) about *PLS* stated that the procedure used to analyze the data collection is to follow an estimation method based on components (Tenenhaus, 2008a). It is an iterative algorithm that solves first blocks separate measurement model and then estimated the path coefficients in the structural model; allowing better to explain the residual variance of the latent variables, and also the manifest variables (Fornell & Bookstein, 1982). This procedure has led, not only *PLS* has been considered a more exploratory approach to confirmatory, but also, because *PLS* has a soft modeling approach it does not require strong assumptions about the size distributions of the sample and the measuring scale. Also has been recognized as interesting, especially in those fields of application where assumptions are not sustainable, at least in its entirety. This feature implies that the lack of a classic parametric inferential framework is replaced by empirical confidence intervals and hypothesis testing procedures based on resampling methods (Chin, 1998; Tenenhaus et al., 2005), as bootstrapping, also used in this study. *PLS* is more oriented to the optimization of predictions, which are explained by the differences that the statistical accuracy of the estimates.

The following was the procedure of data analysis:

1. Evaluation of global model adjustment.
2. Evaluation of the structural model which analyzed each of the partial models in four steps. First, the effect of the moderating variable opportunity cost of the employee on the relationship between extrinsic rewards and intention to leave the organization. Second, the effect of the moderating variable opportunity cost of the employee on the relationship between the intrinsic rewards and intention to leave the organization. Third, the relationship between exogenous constructs (extrinsic rewards, intrinsic rewards, and human capital) and endogenous construct (intention to leave the University). Fourth, the relationship between the

intention to leave the company and the decision to create enterprise or linked to another organization.

The questionnaire applied to professors titled "Questionnaire About the moderating role of the opportunity cost on employees' mobility in the higher education Intentions level"; which mostly they were defined on a seven-point Likert scale. Initially, it is important to note that the base was made up of 131 cases (surveyed professors) who answered 61 questions in addition to the priority control information. The grouping of the variables involved in the model was such that six latent variables accounted for a total of 61 manifest variables were proposed. The summary of the distribution of these variables are presented in Table E2 in Appendix E. All manifest variables are linked to each of its corresponding endogenous latent variables, through a measurement model defined by a *PLS* relationships. Figure 3 shows the diagram of *PLS-PM* route, Model 1, with the latent variables and the manifest variables used.

The results are presented in the findings in the following order: those associated with the global model and detailed structural model. *PLS-PM* diagram route, analysis of *homogeneity* and *dimensionality* of the blocks, *multicollinearity analysis, analysis of global adjustment model, bootstrap analysis,* and R^2*:* Regarding the first results are the following. On the second, for each latent variable defined in the study: setting information on the structural model, level of significance and correlation. Finally, validation of the research hypotheses.

Findings

Because employee mobility generates serious problems for companies, this study aimed to research three most important aspects. First, to determine whether the perceptions of University professors, about extrinsic rewards, intrinsic rewards and organizational support to human capital affecting the individual's intention to leave the University. Second sought to identify if the opportunity cost of the professor moderated the relationship between perceived

rewards and intention to leave the University. Third, to determine the difference between the professor who choose to create a new venture and those who want to link to another organization.

Results associated with global model

Related to the global model the following figure shows the diagram of *PLS-PM* route with the latent variables and the manifest variables used. Figure 3 shows the Model 1. In this path diagram model, they are graphed the relationships between the different constructs and their path coefficients, as well as loads of each manifest variable in its particular relationship with the construct to which they belong.

It is assumed that all blocks, the latent variables in the model must be a reflection of its manifest variables, they must be standardized and unidimensional. The uniqueness criterion ensures dimensionality; this means that the manifest variables explain the latent variable. Therefore, first, it verified for each block homogeneity and dimensionality. According to Chin (1998), a block is considered homogeneous if the *Rho Dillon-Goldstein (D.G)* is greater than 0.7; and will be one dimensional if the first eigenvalue is sufficiently higher than the next and others. The results indicated that the values for each of the latent variables uniqueness criterion are met, meaning that the first factor can explain each construct. At least 68% of the information contained in that block of manifest variables can be explained by the first factor (Henseler, Ringle, & Sarstedt, 2012). That is, the uniqueness criterion allowed transform block manifest variables to a single construct. Table E3 in Appendix E shows the distribution and importance of the manifest variables in the model proposed within each block or latent variable study, in which the homogeneity of each block and the *dimensionality* of the same was verified. It shows that all *"Rho D.G"* are higher than

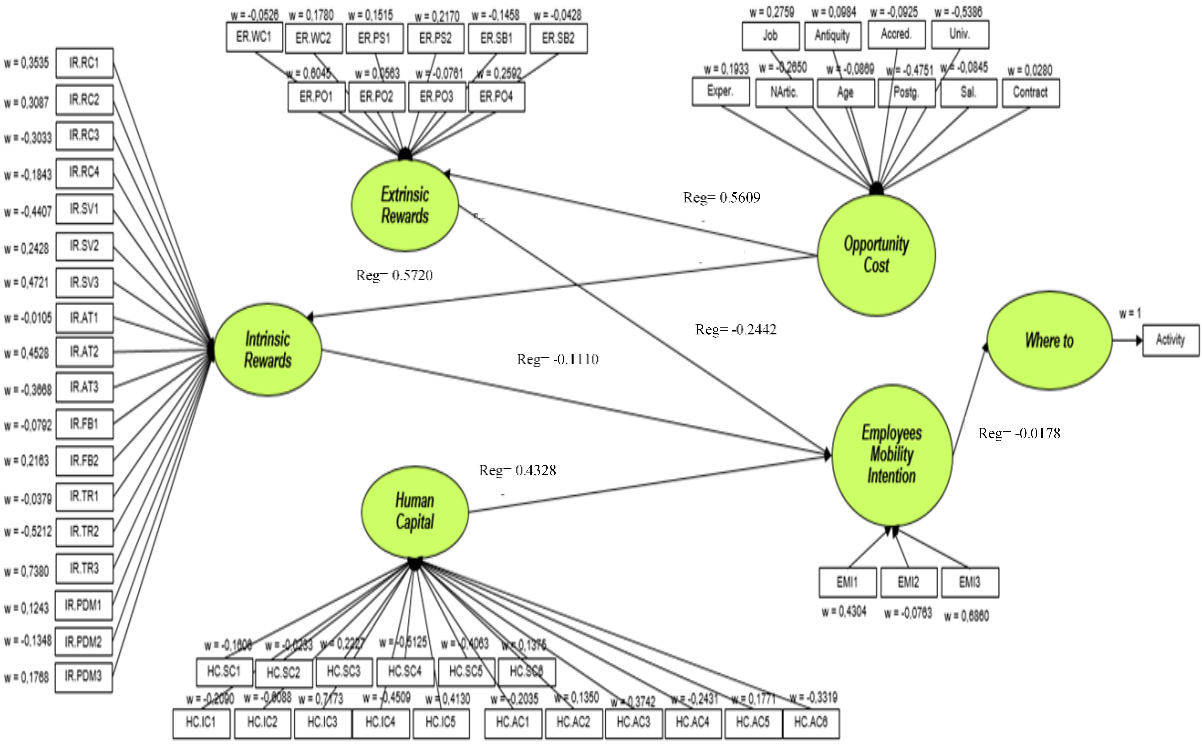


Figure 3: PLS Diagram Route. Model 1.

0.70 which *homogeneity* in each of the blocks is assumed. Also notice that each of the eigenvalues, the first within each block is greater than unity and are significantly higher than the next eigenvalue, respectively; indicating *uniqueness*, and is a sign that the model is appropriate. Only the latent variable "Where to" does not indicate information, because it was explained with a single manifest variable.

It is of particular interest that the Cronbach´s alpha levels around 90% and slightly higher, identifying an effect of collinearity between manifest variables into a block of four latent variables. In developing an analysis of *multicollinearity*, it was observed that there were early *collinearity* between “my University generates spaces for professors apply knowledge of an area of the Faculty/University to solve problems arising in others,” “my University generates spaces for interact and exchange ideas with faculty from other areas” vs. “my University generates spaces for combine and exchange knowledge to solve problems or create opportunities.” Also among “my University can maintain stably experts and/or

competent professors in their work and functions," "my University can maintain stably professors who develop new ideas and knowledge" vs. "my University can maintain stably to highly qualified professors" for block Human Capital; plus a slight *collinearity* between "I am satisfied with the amount of pay I receive for the job I do" and "I feel I am paid fairly considering the work I do" was observed in the block Extrinsic Rewards; however, when excluding these manifest variables in the methodology of *PLS path model,* the quality of the estimation of the internal models worsened, since the absence of these variables made the adjustment coefficients were lower than in the scenario of complete variables; hence it was necessary to include in the model.

Applying *PLS path modeling* provide the *Goodness of Fits (GoF) index* overall fit of the model, which is presented below. In this sense, Tenenhaus, Amato, and Esposito (2004) developed the *GoF index* to take into account the performance of the model, in the measurement as in the structural model, and therefore provide a single measure for the overall performance prediction model. Both the results of the relative *GoF index* model, as simulated by bootstrap were very similar indicating consistency in the estimates. But nevertheless, Henseler and Sarstedt (2013) challenged the usefulness of the *Gof index* conceptually and empirically, because this index cannot separate valid from invalid models. Then the essential criterion for assessing the structural model is the coefficient of determination R^2 of the endogenous latent variables. Chin (1998) described R^2 values of 0.67, 0.33, and 0.19 in *PLS path models* as substantial, moderate, and weak, respectively. But nevertheless, Hair et al. (2014) considered that "R^2 values of 0.75, 0.50, or 0.25 for the endogenous construct can be described substantially as respectively, moderate, and weak" (p. 186). The R^2 obtained for the global model was 49.34%, indicating an effect of joint causality from the exogenous latent variables to the endogenous latent variable, and it implies that the selection of the manifest variables was moderately acceptable. According to Hair et al. (2014)

the adjusted R^2 value obtained for the endogenous construct employees´ mobility intentions (0.4934) was a very close fit to be moderate. Also, the *p-value* (0.0000) indicates that the results were statistically significant. Table E4, Model 1 in Appendix E.

Additionally, the sense of the relations of the latent exogenous variables on the endogenous latent variable was: human capital (0.6628), intrinsic rewards (-0.5197), and extrinsic rewards (-0.6099); these correlations imply that the higher human capital, the greater the intention to withdraw, that higher both extrinsic rewards and intrinsic, the lower the intention to leave the University. Although the model 1 fit was significant 49.34%, however, since human capital construct showed a positive correlation, which does not correspond with previous studies (Chatman, 1991; Felps et al., 2009; Kristof-Brown et al., 2005; Martín, 2011; Mitchell et al., 2001; Subramanian & Shine, 2013; Verquer et al., 2003; Wheeler et al., 2005; Wheeler et al., 2007; Yu-chen, 2015). This result may be because, unlike Martín (2011) this research attempted to prove that the three dimensions that make up the human capital had a negative correlation with the intention to leave the organization; while Martín (2011) only proved the existence of a negative relationship between affective capital and voluntary turnover from an organizational perspective, while the other two dimensions of human capital, intellectual and social capital, Martin 's related to the innovation capacity of the organization. Then it is possible that the results do not generate a better model fit. It was convenient, according to Martín (2011) only be included in the final model the affective dimension, which had a direct relationship with the intention to remain in the organization, in order to determine whether the results are maintained or otherwise changed. The results showed when the intellectual capital and the social capital were removed from the model, the correlation changed and became negative. The reason that led to the adjustment of the global model was because it was possible to be misapplied type I error made when the researcher does not accept the null hypothesis being true in this population.

The final model, Model 2 generated was statistically significant (*p-value* 0.0000), and a moderate adjustment 48.27%. Also, all exogenous variables improved their statistical significance over the previous model. Table E12 shows a summary of the structural model statistics. These result explains that employees´ mobility intentions from the constructs defined in the model has an adjustment of 78.52% indicating an effect of joint causality of the latent exogenous variables against the latent endogenous variable, implying that the selection of the manifest variables, in this fitted model it is acceptable, and the prediction equation global model is as follows. It includes the moderating effect of the opportunity cost of the professor. Figure 4 shows the global model with such adjustments.

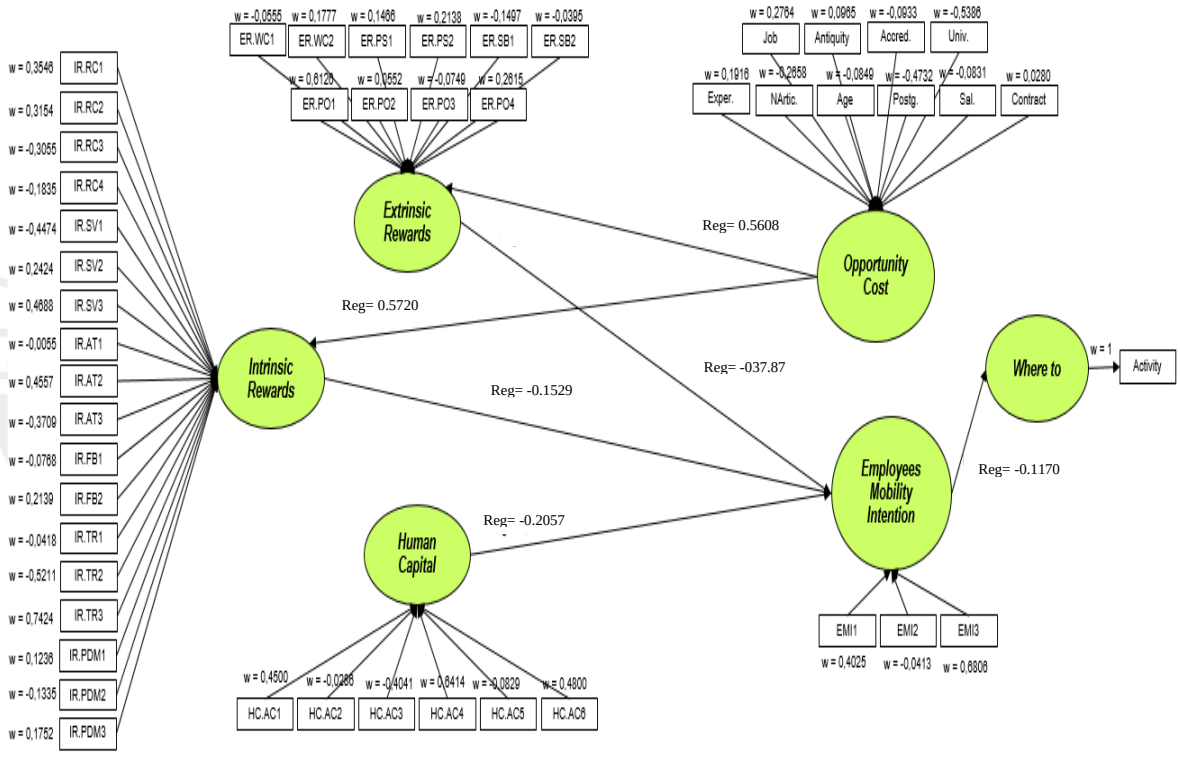


Figure 4: PLS diagram route adjusted. Model 2.

Model equation:

EMI = - 0.3787 * ER – 0.1529 * IR – 0.2057 * HC

EMI: Employees´ mobility intentions, ER: Extrinsic rewards, IR: Intrinsic

Results associated with the structural model

This second part of the statistical analysis presents the results of blocks, according to the research hypotheses raised in their respective statistical study supports. To facilitate reader understanding the results are presented in sections with each of the relationships studied and the results.

Explanation model: employees´ mobility intentions from extrinsic rewards. (Direct relationships). This section presents the results about the relationships between extrinsic rewards and employees´ mobility intentions, without moderation effect, for this reason, the values obtained in this relationship were different from the structural model was affected by the moderation of opportunity cost. The results of this section apply only to direct relationships between the latent variables mentioned above. Table E5 in Appendix E shows the results that supported the research hypothesis (H1), indicated a R^2 (0.4030) and their level of statistical significance (*p-value* 0.0000), which states that the predictive power of the model to explain the relationship between extrinsic rewards and employees´ mobility intentions is moderated with tendency to high, according to Chin (1998). The statistics obtained are found to be significantly important in terms of identifying relationship between the two variables; this can be evidenced through the correlation coefficient (-0.6348), and its direction is inversely proportional. This result is consistent with previous studies presented in Chapter 2 (Campbell et al., 2012; Juma & Lee, 2012; Newman & Sheikh, 2012).

Explanation model: employees´ mobility intentions from intrinsic rewards. (Direct relationships). This section presents the results about the relationships between intrinsic rewards and employees´ mobility intentions, without moderation effect, for this reason, the values obtained in this relationship were different from the structural model was affected by the moderation of opportunity cost. The results of this section apply only to direct relationships between the latent variables mentioned above. Table E6 in Appendix E shows

the results that supported the research hypothesis (H2), indicated a R^2 (0.3355) and their level of statistical significance (*p-value* 0.0000), which states that the predictive power of the model to explain the relationship between intrinsic rewards and employees´ mobility intentions is moderated, according to Chin (1998). The statistics obtained are found to be significantly important in terms of identifying relationship between the two variables; this can be evidenced through the correlation coefficient (-0.5792), and its direction is inversely proportional. This result is consistent with previous studies presented in Chapter 2 (Juma & Lee, 2012; Newman & Sheikh, 2012).

Explanation model: employees´ mobility intentions from human capital. (Direct relationships). This section presents the results about the relationships between human capital and employees´ mobility intentions. The results of this section apply only to direct relationships between the latent variables mentioned above. Table E7 in Appendix E shows the results that not supported the research hypothesis (H3), because it showed a directly proportional relationship between the independent variable and the dependent variable. It is a result contrary to the hypothesis raised. The results showed a R^2 (0.4395) and a level of statistical significance (*p-value* 0.0000), which states that the predictive power of the model to explain the relationship between human capital and employees´ mobility intentions is moderated, according to Chin (1998). The statistics obtained are found to be significantly important in terms of identifying relationship between the two variables; this can be evidenced through the correlation coefficient (0.6629), and its direction is directly proportional. This result is not consistent with previous studies (Martín, 2011), presented in Chapter 2.

Assessment of extrinsic rewards through opportunity cost of the employee. This section presents the moderating effect of the opportunity cost of the employee in relations between extrinsic rewards and employees´ mobility intentions. Table E8 in Appendix E

shows the results. According to these results, in evaluating the R^2 factor indicates the extent of explanation of the influence of the variable extrinsic rewards on the intention to leave the University, through the moderator variable opportunity cost of the employee, it can be seen that the latter generates an effect on the relationship of a 62.46% (R^2 = 0.6246, R = 0.7903) indicating that in fact, there is a relationship opportunity cost effect on these two variables, this being directly proportional relationship (0.7903). The results, also, were statistically significance (*p-value* 0.0000), and they support the hypothesis (H4) , which states that the predictive power of the global model to explain the relationships described above is moderated with tendency to high, according to Chin (1998).

According to the proposal made in the research hypothesis (H4), the results allowed to detect a moderating effect of the opportunity cost of the employee on the relationship between extrinsic rewards and employees´ mobility intentions; therefore it is clear that there is an implicit effect.

Assessment of intrinsic rewards through opportunity cost of the employee. This section presents the moderating effect of the opportunity cost of the employee in relations between intrinsic rewards and employees´ mobility intentions. Table E9 in Appendix E shows the results. According to the results, in evaluating the R^2 factor indicates the extent of explanation of the influence of the variable intrinsic rewards on the intention to leave the University, through the moderator variable opportunity cost of the employee, it can be seen that the latter generates an effect on the relationship of a 54.82% (R^2 = 0.5482, R = 0.7404) indicating that in fact, there is a relationship opportunity cost effect on these two variables, this being directly proportional relationship (0.7404). The results, also, were statistically significance (*p-value* 0.0000), and they support the hypothesis (H5), which states that the predictive power of the global model to explain the relationships described above is moderated with tendency to high, according to Chin (1998).

According to the proposal made in the research hypothesis (H5), the results allowed to detect a moderating effect of the opportunity cost of the employee on the relationship between intrinsic rewards and employees´ mobility intentions; therefore it is clear that there is an implicit effect.

There is no precedent in the literature about the effect of opportunity cost on the relationship described in (H4) and (H5). Nicolaou and Souitaris (2015) conducted a study on professors at a European University, which had created companies from ventures generated from the University; however, they did not use the opportunity cost as moderator variable.

Explanation model: where to from employees´ mobility intentions. This section presents the results about the relationships between employees´ mobility intentions and the professor´s decision whether to create enterprise or linked to another organization. Table E10 in Appendix E. These results not supported the research hypothesis (H6) indicated that this were statistically not significant *p-value* (0.8407), and the R^2 (0.2365) negatively affected the structural adjustment model at this stage, and consequently negatively affected the overall fit of the *PLS* model. Consequently, the decision to create new venture or linked to another organization, cannot be explained from the latent exogenous variable employees´ mobility intentions. The results is not consistent with previous research (Campbell et al., 2012) reported in Chapter 2; however, it is important to mention that these research were conducted with respondents who had already left the organization, and had created their company or were linked to another.

Assessment employees` mobility intentions through extrinsic rewards, intrinsic rewards and human capital. This section presents in Table E11 in Appendix E, the results about relationships between extrinsic rewards, intrinsic rewards and human capital on employees´ mobility intentions. In relation to the overall model, it is important to mention that the model fit was 49.34% R^2 (0.4934), and a level of statistical significance (*p-value*

0.0000), which states that the predictive power of the global model to explain the relationships described above is moderated with tendency to high, according to Chin (1998). There is an implicit relationship between exogenous variables with the intention to leave the University; two of them being moderated by the opportunity cost of employee, namely extrinsic rewards and intrinsic rewards. The exogenous variables that contribute most in this relationship to be statistically significant, are: extrinsic rewards (*p-value* 0.0117) and human capital (*p-value* 0.0000); while intrinsic rewards were not statistically significant (*p-value* 0.1988), there was the possibility of excluding the model, but there was a risk of reducing the quality of the model, for this reason it was included.

Additionally, an *exploratory multivariate analysis* of the manifest variables, only for people who expressed their intention to create company developed. *Multiple Correspondence Analysis (MCA)* is a descriptive and exploratory technique which aims to summarize a lot of information in a small number of dimensions, with the least possible loss of information. *MCA* uses the same general principles of factorial techniques; it is geared to identify associations between different levels of categories of different variables, this to identify multivariate correlation on several variables. The purpose of applying this technique was to detect multidimensional partnerships between all control variables used in this research and thus identify patterns of behavior of professors, which ultimately will be used to guess priori assumptions made by the researcher.

To perform a *MCA* in this context initially proceeded to discriminate cases already defined embodiments, as described below. Originally selected database of cases that met the condition that the respondent had selected the option, "a. Create new venture," included as an option in response to question 49. "If you were to withdraw from the University where he currently works, which of the following options would choose in the first instance?" Once selected these cases proceeded to evaluate all the answers from each of the constructs,

extrinsic rewards, intrinsic rewards, and human capital versus the response options each statement or question employees' mobility construct intentions. It is to identify clusters of answers that indicate patterns of association, between hypothetical decisions that respondents can take in these scenarios; i.e. evidencing relations in the answer choices. It is important to note that all variables belonging or explain each dimension were evaluated on a scale of upward valuation of 1 to 7. Where options 5, 6 and 7 were taken as an indication of agreement (A = Agree) against the respective questioning; and consequently lower values, indicate a disagreement with the statement (D = Disagree). Through three *MCA* technique, three perceptual maps of multiples correspondences were developed, one for each exogenous construct; this to identify whether those who claimed to agree (A) with employees´ mobility intentions, conditioned with the desire to create company would also agree with the different aspects evaluated in each construct. In addition to the above variables some variables construct also included the opportunity cost of the employee to support the process of describing the relationships. The results are presented below. Figure 5 is a map showing the distribution of respondents regarding extrinsic rewards. Analysis: In the previous perceptual map multiple correspondences it was observed that most of the respondents were professors with Masters´ degree, tenure 3 or older, approximately equivalent in gender. It could also be seen that those professors who claim to agree (A) with turnover intention, most said they disagree with almost all statements of the construct, and of particular interest were professors with income levels from 3 to 5 million COP that works in non-accredited universities. Also, professors who do not plan to withdraw from the institution point agree with most of the statements of the construct, except for claims related to proper working conditions, and the personal satisfaction of these conditions. Of particular interest was observed that professors were wages of 6 million COP or more, with Ph.D. Figure 6 is a map showing the distribution of respondents regarding intrinsic rewards. Analysis: In the previous perceptual map multiple

correspondences it was observed that for the intrinsic rewards, the behavior pattern is similar to the previous map. Most assertions construct intrinsic rewards associated inversely with the intention to withdraw; i.e. professors who noted the intention of leaving, say the good measure does not perceive the intrinsic rewards, except statements regarding growth expectations reflected in the development of more complex work, also related to expectations of more complete and more meaningful, and the freedom to act freely and responsibly work. On the other hand, almost all statements in positive level (A) of this construct are inversely associated with the level "disagree" with the related claims with the intention to withdraw.

Figure 7 is a map showing the distribution of respondents regarding human capital. Analysis: In the previous perceptual map multiple correspondences it was observed that for human capital, the pattern is different from the previous maps. Affirmations construct about human capital were associated in equal proportion to the intention to leave the organization, the manifest variables were distributed equitably among those who expressed intention to leave, and those who expressed intention to stay. Those who expressed their agreement with leaving the University, not perceived collaboration among professors to diagnose and resolve problems, not came from unaccredited institutions, not felt that the University fails to keep highly qualified professors, not considered that University was interesting on retaining expert professors and/or competent in their work and functions, not considered that the University had great meaning and personal value to them, not considered the University to treat them fairly. While those who expressed intention to stay in the University, had more experience 5 years, aged 41-50 years, doctoral education, more than 6 million COP salaries come from accredited universities, considered themselves the problems of University, University considers that treats them fairly, collaborate with each other to solve problems, perceived that the University retains the most qualified professors, perceived that the University retains expert professors. It is interesting to note that respondents who expressed intention to leave,

their motives were more associated with gross human capital variables that control variables associated with the opportunity cost.

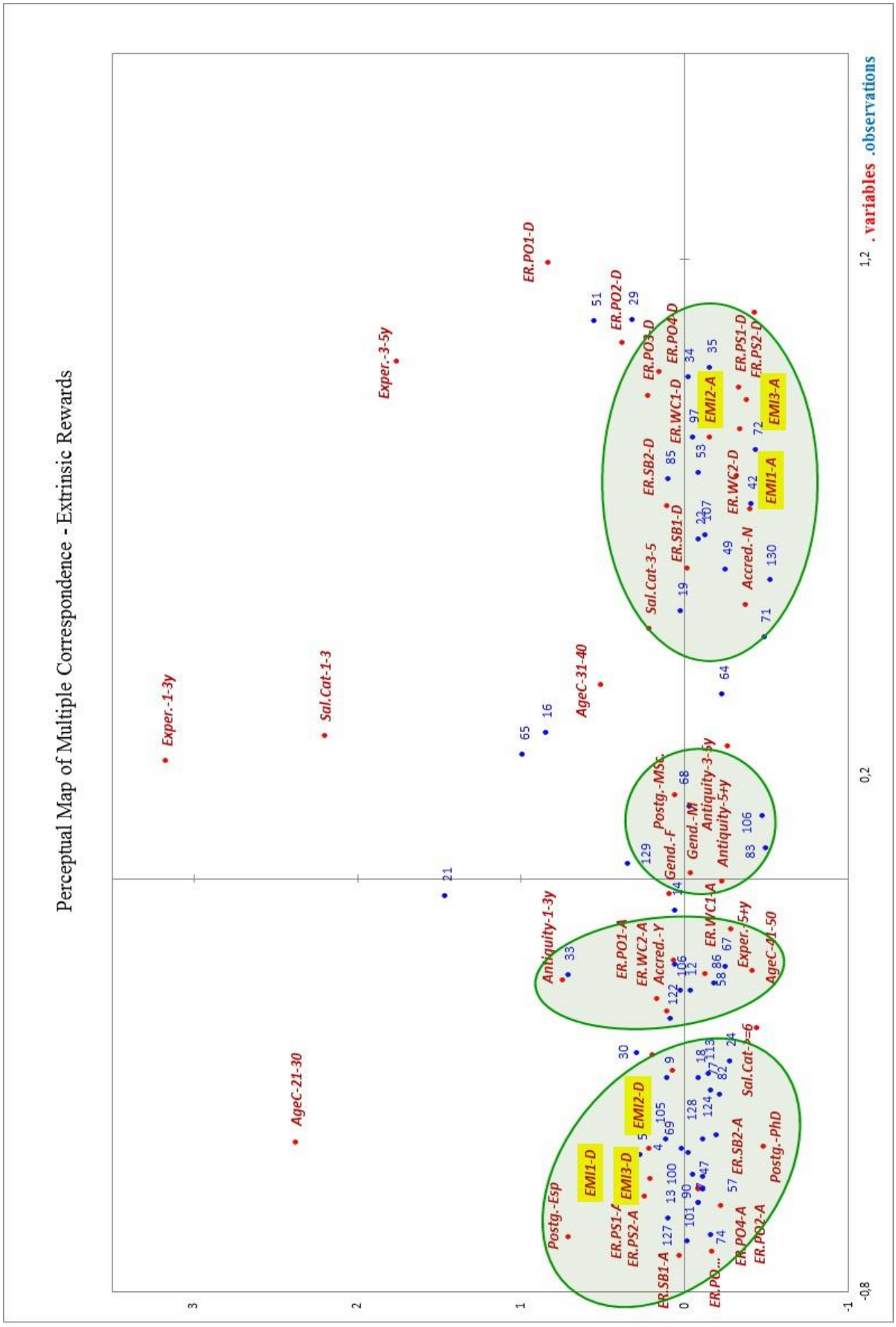


Figure 5*:* Perceptual map of multiple correspondence. Extrinsic rewards.

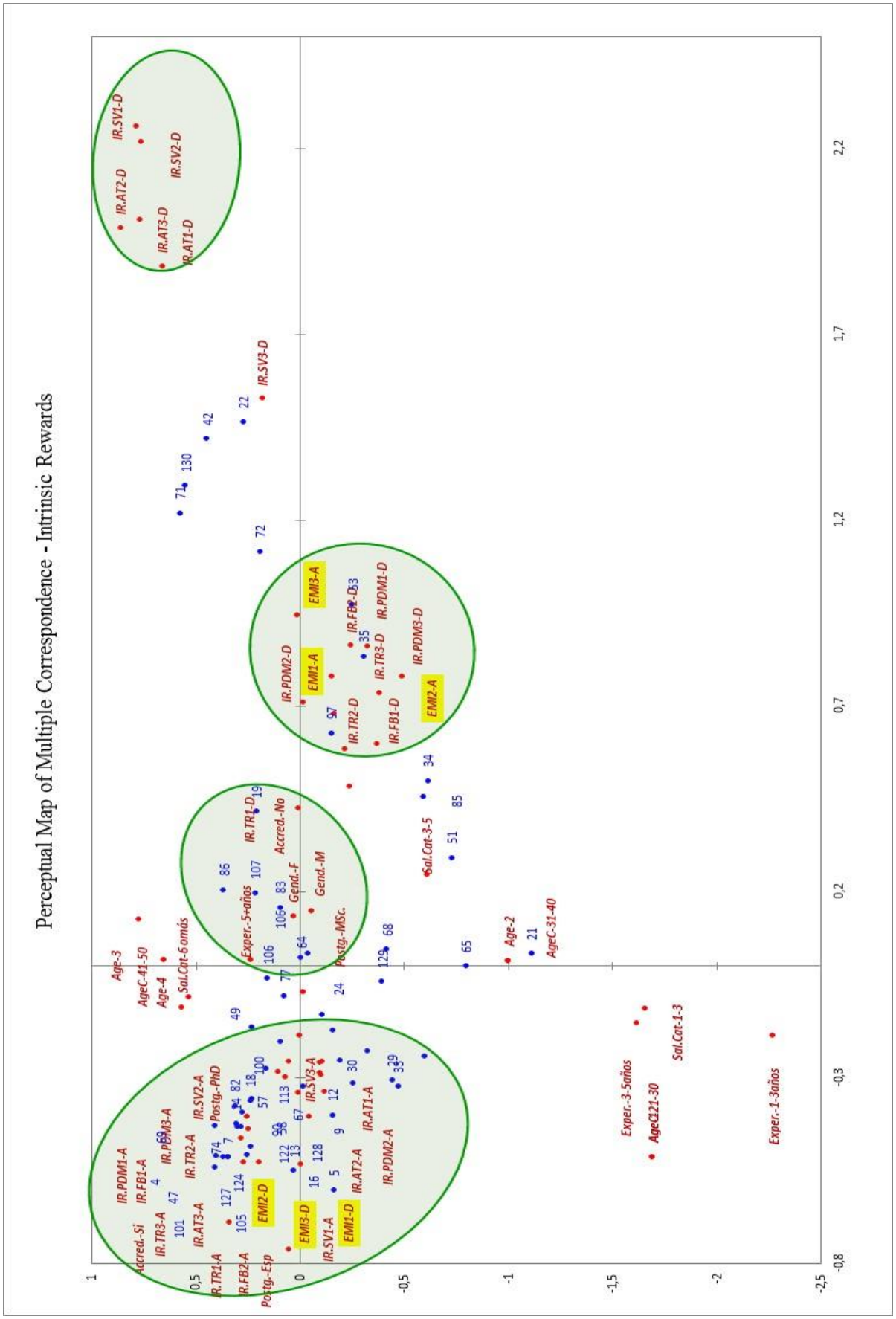


Figure 6: Perceptual map of multiple Correspondence. Intrinsic rewards.

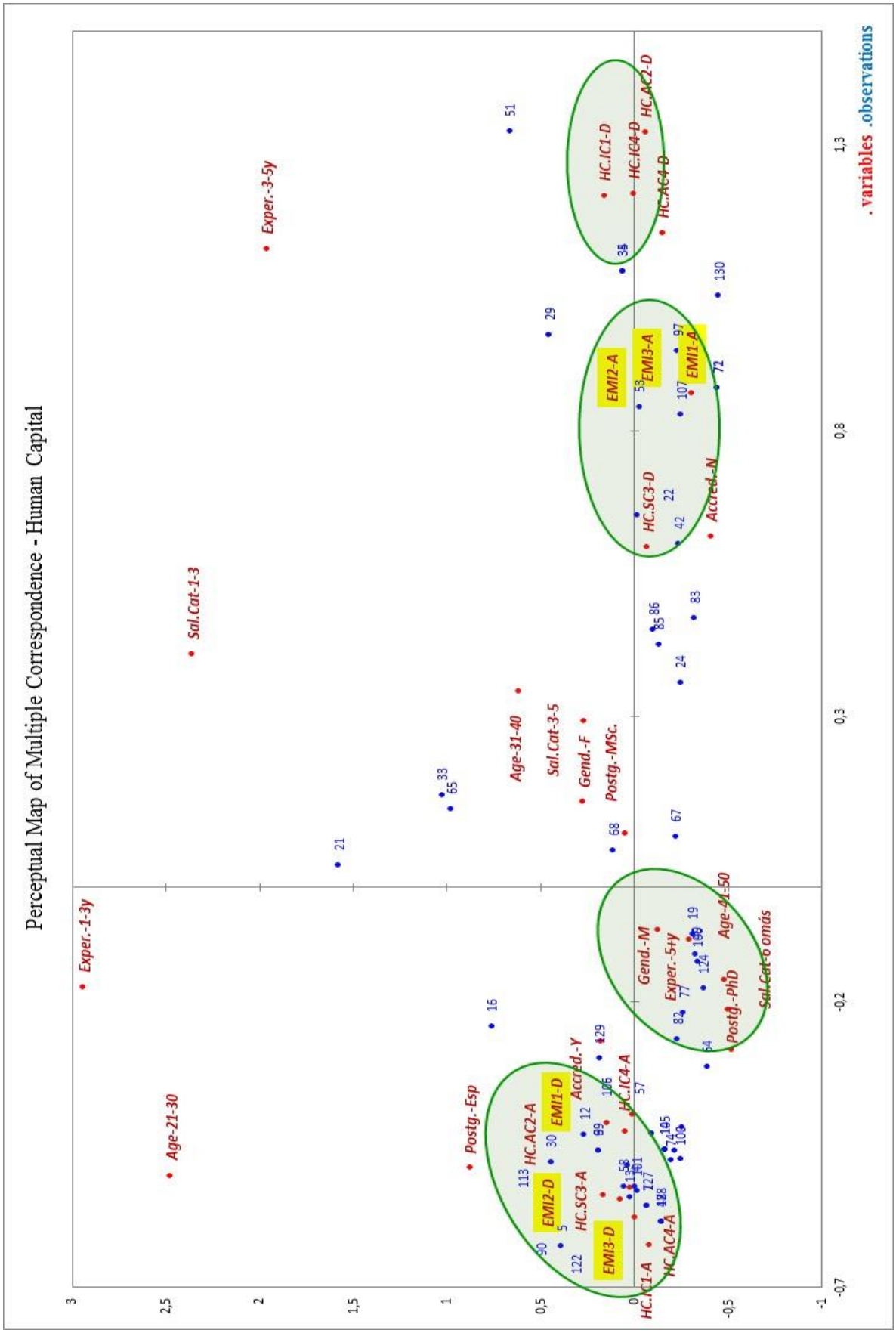


Figure 7: Perceptual map of multiple correspondence. Human capital.

Summary

The findings allowed testing the fit of the overall model at a moderate level. In connection with the structural model findings, they led to the conclusion that both direct relationships between extrinsic rewards and employees´ mobility intentions to leave the University, such as direct relations between the intrinsic rewards and employees´ mobility intentions, expressed in the research hypotheses (H1) and (H2) were supported by the results, both cases *p-value* < α; while the direct relationship between human capital and intend to leave the University, expressed in the research hypothesis (H3) is not supported, *p-value* > α. Regarding the effect of moderating variable opportunity cost of employee in the relationships between extrinsic rewards and intention to leave the University, and in the relationships between intrinsic rewards and intention to leave the University, expressed in the research hypotheses (H4) and (H5) the results supported these hypotheses, both cases *p-value* < α. Finally, the relationship between the intention to leave the University and the decision whether to create new venture or linked to another organization, expressed in the research hypothesis (H6), the results did not support this hypothesis, *p-value* > α.

The intent of Chapter 5 is to form a larger meaning about the data analysis presented in Chapter 4 organized by the following discussion topics. First, introducing the interpretation of the data results. Second, making inferences about the important findings. Third, reporting the lessons learned and ethical dimensions of the research. Fourth, connecting the results of the analysis to leadership implications. Fifth, presenting personal interpretations, reflections, and personal views on broader social significance. Sixth, making recommendations for future research.

Chapter 5: Conclusions and Recommendations

This study wanted to show that the decision of the professor in higher education level related to staying or to leave the University he/she works for was affected by his/her perception of the rewards that he/she receives, both extrinsic as intrinsic; as well as, his/her perception related to the value that University gives the human capital formed by professors. Also know if the decision was moderated by the effect that the opportunity cost of the professor could have on the relationships between extrinsic rewards and employees´ mobility intentions, and between the intrinsic rewards and employees´ mobility intentions. Additionally, conditioned on mobility, this study wanted to show if the decision to leave college and create business was associated with high levels of rewards received, and high perceptions of organizational support for human capital.

This study analyzed in the field of higher education, a sector characterized by intensive use of knowledge, decision-making of high-performing employees respect to stay or to leave the organization they work for. This quantitative study was based on a significant research problem related to employees´ mobility intentions, which represents a loss of human capital in the professional service sector companies, specifically companies with intensive use of knowledge; as is the case of the higher education sector.

This research was expected to find support for suggested hypotheses. First, whether there were negative relationships between the three latent exogenous variables and the endogenous variable (Campbell et al., 2012; Juma & Lee, 2012; Newman & Sheikh, 2012; Martín, 2011). Second, whether the opportunity cost of the professor affected both relationships between extrinsic rewards and employees´ mobility intentions, as intrinsic rewards and employees´ mobility intentions (Yip, 2014). Third, whether conditioned on employees´ mobility intentions, professors with higher levels of extrinsic and intrinsic

rewards and professors who perceived that the University valued human capital, were more likely to create new venture than join to another organization (Campbell et al., 2012).

Indeed, previous relationships led to propose a global model incorporating six constructs or latent variables, namely extrinsic rewards, intrinsic rewards, human capital, the opportunity cost of the professor, employees´ mobility intentions, and where to. The complexity of the constructs, dimensions, and their relationships and interactions, which became visible in the global model, led to search the literature, at least one model that incorporated several independent constructs and dependents, and a moderating variable (Bontis & Serenko, 2007; Cotton & Tuttle, 1986; Griffeth et al., 2000).

This study was limited by the honesty of the responses of the survey participants; the time horizon for the study; the reliability of the instruments used; data obtained in the study was subjective, because they represent the points of view of the respondents; and results of previous studies that have shown that attitudes related to work and perceptions in a particular situation tend to change over time, according to a significant organizational experience (Kammeyer-Mueller, Wanberg, Glomb, & Ahlburg, 2005).

Regarding the limitations two questions arise: First, are there special conditions to be considered in the size of the sample to draw valid conclusions in this particular professional education services sector, or not?; second, is it possible to go beyond the specific focus and raise valid generalizations for University professors in Colombia? Regarding the first question, for statistical technique *PLS* the number of professors surveyed was higher than the minimum required, *N= 131,* while the level of statistical power of 80% and a specific level of complexity of the *PLS path model* was *N= 75.* On the other hand, R^2 obtained allow to speak of adequate adjustment of the global model, and a predictive model of moderate level, further considering that the result was statistically significant. Table E12 in Appendix E. Besides the population hardly amounts to approximately 2,739 professors. Regarding second question,

while is true that the teaching profession is regulated in Colombia by the Working Substantive Code and by rulings from the Constitutional Court. It is also possible, according to the above results, and the results that supported the research hypotheses to make generalizations, with some level of moderation, for the union of University professors in Colombia. Also, it is possible, not only can draw valid conclusions about the population, but there is the possibility of extending to Latin America.

This chapter presents the conclusions, implications, and recommendations. It implies the interpretation of the data results, making inferences about important findings, reporting the lessons learned and ethical dimensions of the research, connecting results with implications for leadership, presentation of personal interpretations and reflections, and making recommendations for further studies.

Conclusions

This study aimed to test six research hypotheses. Results were presented in the Chapter 4. In this chapter is important to know, what these results mean for the population studied in order to draw conclusions. In this sense, it was necessary to characterize the professors surveyed, in order to understand what they mean the hypotheses that were supported. To do it, it resorted to the cluster analysis statistical technique, because it facilitates this task, as stated above (Malhotra, 2008).

The number of clusters to build is an important decision that is based on experience and the ability to ensure sufficient number of attributes that differentiate each group built. When many clusters are built, it is tough to know what attributes characterize each group. When only two clusters are built, there is no discrimination, because the whole trend can go to one side, high or low. Therefore, the decision to build three clusters facilitates better discrimination of the sample in high, medium or low results. The graph left having made a two-stage cluster in SPSS. The manifest variable "as soon as possible I will leave the

University" was the criterion for selection of clusters for the first three hypotheses, specifically, professors who marked options 5, 6 or 7. Another criterion for the construction of clusters related to same group of hypotheses was the inclusion of all the manifest variables related to exogenous constructs involved.

Related to H1. Relationships between extrinsic rewards and employees´ mobility intentions.

The percentages in Figure F1 show the membership of professors surveyed the three clusters built; it shows the size of the three clusters: 28.6%, 33.3% and 38.1%. The most important manifest variables that help identify common characteristics among individuals associated with extrinsic rewards, and constitute important factors to be considered by the directives in Universities, according to the predictor importance in Figure F2 are: "I feel that opportunities that opportunities for advancement are articulated with policies promotion," "I feel that promotion policies are good," and "the University where I work I give me great promotion opportunities." Other manifest variables on extrinsic rewards are not as important for professors. Figures related important predictor indicate that: "The importance of the predictor is not related to the accuracy of the model. Just relates to the importance of each predictor for prognosis, regardless of whether it is necessary or not" (IBM, 2011, p. 276).

Cluster 1 in Figure F3 indicates that most of the professors surveyed rated on the scale marked values of 6 and 7, on the seven-point Likert scale. It means they have a high perception of extrinsic rewards of the University where they are working. Clusters 2 and 3 in Figure F4 and Figure F5 are very similar, almost the same point. Both clusters don´t have pronounced tendency to either side of the scale. They differ only in two manifest variables: "The University where I work gives me great opportunities promotion," and "I am satisfied with working conditions (workplace, lighting, ventilation, noise, privacy, etc.) in my workplace."

In conclusion, concerning those professors who said that as quickly as possible will leave the University, it is clear that perceptions are divided against extrinsic rewards offered by the University; there is not a strong tendency to one side of the seven-point Likert scale. The first group was the most homogeneous, highlighted with a 28.6% that the rewards are high, while the other two groups representing 71.4% of professors surveyed said they disagree with the rewards are high, which motivates them to pursue other opportunities.

Related to H2. Relationships between intrinsic rewards and employees´ mobility intentions.

The percentages in Figure F6 show the membership of professors surveyed the three clusters built; it shows the size of the three clusters: 28.6%, 42.9% and 28.6%. The most important manifest variables that help identify common characteristics among individuals associated with intrinsic rewards, and constitute important factors to be considered by the directives in Universities, according to the predictor importance in Figure F7 are: "I know exactly what is expected of me in my job," "my boss asked my opinion when a problem arises," "my growth expectations are reflected in the development of more complex jobs within the University," "I receive periodic induction prior to contacting students (at least twice a year)," "my boss gives me feedback about how well I am doing my job," "I can influence decisions of my boss regarding issues in my job," and "I feel that it is easy to receive from my boss ideas to improve my work." Other manifest variables on extrinsic rewards are not as important for professors.

Cluster 1 in Figure F8 indicates that most of the professors surveyed scored 13 of 18 manifest variables with values of 6 and 7, on the seven-point Likert scale. It means they have a high perception of intrinsic rewards of the University where they are working. Cluster 2 in Figure F9 show much dispersion with a high tendency to low scores on the following manifest variables, which means that professors of this group do not perceive that these

intrinsic rewards are important in the University where they work. They are: "My boss asked my review when a problem arises," "I receive periodic induction prior to contacting students (at least twice a year)," "my boss gives me feedback about how well I am doing my job," "I can influence regarding decisions of my boss issues in my job," "I feel that it is easy to receive from my boss Ideas to improve my work," and "I receive recognition from my boss for doing my job well." It can be seen that most of these manifest variables were considered as the most important by all respondents, but not for this group. Cluster 3 in Figure F10 indicates that professors surveyed perceive high intrinsic rewards, 17 of the 18 items were marked with values of 5 and 6, on the seven-point Likert scale. The results of the perceptions of professors in this cluster resemble perceptions cluster 1. Despite the cluster 2 represents 42% of respondents who perceive that intrinsic rewards are not visible; the remaining 58% made up of clusters 1 and 3 recognized intrinsic rewards, as expressed in the comments of Figure F8 and F10.

Related to H3. Relationships between human capital and employees´ mobility intentions.

The percentages in Figure F11 show the membership of professors surveyed the three clusters built. The most important manifest variables that help to identify common characteristics among individuals associated with human capital, according to the predictor importance in Figure F12 are: "Professors feel that the University is honest, sincere and can trust the Institution," "professors consider University problems as their own," "professors have a strong sense of belonging to the University," "University generates spaces to share their own ideas to address or propose new ideas, products or services," "University generates spaces to combine and exchange knowledge to solve problems or create opportunities," "professors believe that the University treats them fairly," and "professors consider that the University has a great sense and personal value to them".

Cluster 1 in Figure F13 indicates that most of the professors surveyed scored 16 of 17 manifest variables with values of 5 and 6, on the seven-point Likert scale. It means they have a high perception of human capital of the University where they are working. Cluster 2 in Figure F14 shows a tendency to low scores in 13 of 17 manifest variables, which means that professors of this group do not perceive that human capital are important in the University where they work. Only two manifest variables were scores of 5 and 6. They are: "Professors consider University problems as their own," and "professors have a strong sense of belonging to the University." Cluster 3 results in Figure F15 indicates that professors surveyed perceive that the University does not support the human capital, and for that reason, they marked with the lowest value all manifest variables. Perceptions of professors in cluster 3 are coincident with those of the cluster 2 except for the two manifest variables presented in the previous paragraph. These two clusters represent 64.3% of respondents who perceive that the University does not care for human capital, against 35.7% who have a different perception.

Related to H4. Moderating effect of the opportunity cost of the professor in the relation between extrinsic rewards and employees´ mobility intentions.

The percentages in Figure F16 show the membership of professors surveyed the three clusters built. Also, the manifest variable: "as soon as possible I will leave the University" was the criterion for selection of clusters for the hypotheses 4 and 5; specifically, professors who marked options 5, 6 or 7, as in previous cluster analysis. Nevertheless, the difference between the following cluster analysis for (H4) and (H5), and the above resides in two criterion. First, the manifest variables of the latent variables extrinsic rewards and intrinsic rewards were selected using factor analysis with principal axis factoring and scores above 0.8 in the factor analysis. Second, the opportunity cost of the professor took into account, with the aim of identifying groups of individuals who share the same features.

According to the predictor importance in Figure F17 the most significant manifest variables related to extrinsic rewards, taking into account the opportunity cost of the professor, and constitute important factors to be considered by the directives in Universities, are: "I feel that opportunities for advancement are articulated with promotion policies," "I feel that promotion policies are good," "the University where I work gives me great promotion opportunities," and "I feel I am paid fairly considering the work I do." Results show that the first three manifest variables provide relevant information in creating clusters, and that the manifest variables of the opportunity cost of the professor, that better contribute to the moderation between extrinsic rewards and employees´ mobility intentions are old, age, salary, and experience. This result confirms the approach of literature about the inclusion of wages in the opportunity cost of the professor.

Cluster 1 in Figure F18 is made up of professors with the following profile: Men between 41 to 50 years old, tenure and teaching experience over a five-year period, salary between 3 to 5 million COP, singles, working at private and non-accredited universities with fixed-term contract, current position research professor, one research published in professional journals, and master's degree. These professors perceive low extrinsic rewards, which marked with values of 1 and 2 on the seven-point Likert scale, specifically: "I feel that opportunities for advancement are articulated with promotion policies," "I feel that promotion policies are good," "the University where I work gives me great promotion opportunities," and "I feel I am paid fairly considering the work I do."

Cluster 2 in Figure F19 is made up of professors with the following profile: Men between 41 to 50 years old, tenure and teaching experience over a five-year period, salary between 5 to 8 million COP, married, working at public and accredited universities with permanent term-contract, current position research professor, zero research published in professional journals, and master´s degree. These professors appreciate more these two types

of extrinsic rewards, which marked with values of 5 and 6 on the seven-point Likert scale, specifically: "I feel that opportunities for advancement are articulated with promotion policies," and "the University where I work gives me great promotion opportunities." They consider acceptable both promotion policies such as salary they receive for their work, and they marked with a value of 4 on the same scale.

Cluster 3 in Figure F20 is made up of professors with the following profile: Men between 31 to 40 years old, tenure from 1 to 3 years, salary between 1 to 3 million COP, teaching experience over a five-year period, single, working at private and accredited universities with fixed-term contract, current position research professor, two research published in professional journals, and master´s degree. These professors perceive low extrinsic rewards, which they were marked 1 on the seven-point Likert scale, specifically: "I feel that opportunities for advancement are articulated with promotion policies," "I feel that promotion policies are good," and "the University where I work gives me great promotion opportunities." They consider acceptable the salary they receive for their work, and marked with a value of 4 on the same scale.

The following are the shared characteristics in the three clusters among professors who expressed interest in leaving the University: Men, master's degree, current position researcher professor, tenure and teaching experience over a five-year period, they have published 1 or 2 research in professional journals. 64.3% of these professors work in private universities and earn 3 to 5 million COP, single, fixed-term contract; while 35.7% of professors surveyed work in accredited public universities, earn from 5 to 8 million pesos, married, permanent term contract, they don´t have published research in professional journals (see Table 2).

The above profiles of professors are those who are more likely to leave the University. It is important to note that professors working in private and non-accredited universities are

those with the lowest perceptions of extrinsic rewards received, and earn less than their peers working in public and accredited universities. Ratings than those given to these extrinsic rewards ranging from 1 to 2 on the seven-point Likert scale.

Table 2

Comparison of Clusters on the Moderating Effect of the Opportunity Cost of the Professor in the Relationship Between Extrinsic Rewards and Intention to Leave the University

	Cluster 1	Cluster 2	Cluster 3
Percentage	38,1	35,7	26,2
Age	41-50	41-50	31 to 40
Salary	3 to 5 million	5 to 8 million	3 to 5 million
Experience	5 or more	5 or more	5 or more
Marital status	Single	Married	Single
Type of University	Private	Public	Private
Contract	Fixed-term	Permanent	Fixed-term
High-quality institutional accreditation	No	Yes	Yes
Type of job	Professor / researcher	Professor / researcher	Professor / researcher
N° articles	1	0	2
Genre	Male	Male	Male
Level of education	Master	Master	Master
Tenure	5 or more	5 or more	1 to 3 years
I feel that opportunities for advancement are articulated with promotion policies	Low 2	High 6	Low 1
I feel that promotion policies are good	Low 2	Acceptable 4	Low 1
The University where I work gives me great promotion opportunities	Low 1	High 5	Low 1
I feel I am paid fairly considering the work I do	Low 1	Acceptable 4	Acceptable 4

While 26.2% of these professors are between 31 to 40 years old, and they considered acceptable wages they earn; 38.1% of professors are between 41 to 50 years old, earn the same salary, and consequently they feel underpaid. Importantly, the following profiles of professors showed no trend related to interest to leave the University: women and correspond to half of the surveyed professors, professors who earn more than 8 million COP, over 51 years, Ph.D., and current position: director or dean. The number of scientific articles published in professional journals is not perceived as an incentive, and therefore does not encourage these professors to be productive in conducting research.

Related to H5. Moderating effect of the opportunity cost of the professor in the relation between intrinsic rewards and employees´ mobility intentions.

The percentages in Figure F21 show the membership of professors surveyed the three clusters built. Given the use of the same methodology used for the above cluster analysis, and according to the predictor importance in Figure F22 the most significant manifest variables related to intrinsic rewards, taking into account the opportunity cost of the professor, and constitute important factors to be considered by the directives in Universities, are: "I feel that it is easy to receive from my boss ideas to improve my work," "I know exactly what is expected of me in my job," "my boss asked my opinion when a problem arises," and "my work get me the opportunity to act freely in the way I do it." Results show that the first three manifest variables provide relevant information in creating clusters, and that the manifest variables of the opportunity cost of the professor, that better contribute to the moderation between intrinsic rewards and employees´ mobility intentions are salary, and current position. This result confirms the approach of literature about the inclusion of wages in the opportunity cost of the professor.

Cluster 1 in Figure F23 is made up of professors with the following profile: women, between 31 to 40 years old, tenure and teaching experience over a five-year period, salary between 3 to 5 million COP, married, working at private and non-accredited universities with permanent contract, current position research professor, two research published in professional journals, and master's degree. These professors perceive low extrinsic rewards, which marked with value of 1 and 2 on the seven-point Likert scale, specifically: "I feel that it is easy to receive from my boss ideas to improve my work," "my boss asked my opinion when a problem arises," and “I receive continuing training to provide a good job.” Professors perceive with acceptable level, which marked with value of 4 on the seven-point Likert scale, specifically: "I know exactly what is expected of me in my job." They perceive with high

level, which marked with value of 5 on the seven-point Likert scale, specifically: “My work get me the opportunity to act freely in the way I do it."

Cluster 2 in Figure F24 is made up of professors with the following profile: men between 41 to 50 years old, tenure and teaching experience over a five-year period, salary between 5 to 8 million COP, married, working at private and accredited universities with permanent contract, current position research professor, zero research published in professional journals, and master´s degree. These professors appreciate more these two types of intrinsic rewards, which marked with value of 6 on the seven-point Likert scale, specifically: "I feel that it is easy to receive from my boss ideas to improve my work," "I know exactly what is expected of me in my job," "my boss asked my opinion when a problem arises," and “my work get me the opportunity to act freely in the way I do it." They value with a low score 3 manifest variable: “I receive continuing training to provide a good job.”

Cluster 3 in Figure F25 is made up of professors with the following profile: men between 31 to 40 years old, tenure and teaching experience over a five-year period, salary between 5 to 8 million COP, single, working at private and accredited universities with fixed-term contract, current position research professor, zero research published in professional journals, male, and master´s degree. These professors receive high intrinsic rewards, and labeled with values of 5, 6 and 7 in a seven-point Likert scale, the following manifest variables: "I feel that it is easy to receive from my boss ideas to improve my work," "I know exactly what is expected of me in my job," "my boss asked my opinion when a problem arises," “my work get me the opportunity to act freely in the way I do it," and “I receive continuing training to provide a good job.”

The following are the shared characteristics in the three clusters among professors who expressed interest in leaving the University: Professors with master's degree, current position researcher professor, tenure and teaching experience over a five-year period, and

working at private universities. But nevertheless, while the 61.9% of these professors are men, earn 5 to 8 million COP, and working in universities with accreditation, and they don´t have published research papers in the last year; 38.1% are women, married, earn 3 to 5 million COP, working in universities without accreditation. 71.4% of the professors are 31 to 40 years old, 33.3% are men, earn 5 to 8 million COP, single, and they did not make any publication in refereed journals in the previous year; while the other 38.1% are women, married, earn 3 to 5 million and they published two articles in refereed journals in the previous year.

The above profiles of professors are those who are more likely to leave the University. There are two groups of professors between 31 and 40 years old with master level. The first group consists of women, married, permanent contract with low wages, and lower perceptions of intrinsic rewards received; while the second group consists of men, singles, fixed-term contract, and best perceptions of intrinsic rewards received, as seen in Table 3. There are one group of professors between 41 and 50 years old, men, married, also with master level, permanent contract, working in universities with accreditation, at and the same level of earnings that the group of men aged 31-40 mentioned above. Both groups of male professors have a high perception of the intrinsic rewards received.

Importantly, as in the previous analysis, about the moderating effect of the opportunity cost on the relationship between the extrinsic rewards and employees´ mobility intentions, it can be confirmed in this second analysis, about the moderating effect of the opportunity cost on the relationship between the intrinsic rewards and employees´ mobility intentions, that professors with the lowest incomes are those with the lowest perceptions of extrinsic and intrinsic rewards received. Results showed between 31 and 40 years old men are more likely than women to leave the University, and between 41 and 50 years old, this propensity to move decreased by 40% among men. Professors who belong to accredited

universities have a better perception of internal rewards; however, this perception changes dramatically against external rewards when professors earn lower wages. Tenure and teaching experience although do not generate a better salary, they do produce a greater propensity to leave the University. While the 64.3% of professors surveyed have lower perceptions of extrinsic rewards received, only 38.1% of professors share the same perceptions regarding the intrinsic rewards received; which means that professors value more extrinsic rewards than intrinsic rewards. The analysis of the moderating effect of the opportunity cost of the professor, on both extrinsic relations as intrinsic allowed to find the following common characteristics in professors who expressed interest in leaving the University: ages between 31 and 40 years old, and between 41 and 50 years old; both with more than five years teaching experience, and with master's degree; the vast majority (86.9%) with more than five years of tenure, belonging private universities. Neither the type of contract makes a difference, nor marital status. The vast majority are men (80.9%), they showed greater interest than women by the extrinsic rewards received; when their perception of these rewards is little they increase in them the desire to leave the University. Faced with the intrinsic rewards are large differences between men and women, while men perceived high rewards, the woman, on the contrary, don´t perceive them.

The importance of findings according to literature review show that studies of employees´ mobility intentions effectively take part of the three disciplines mentioned above (Barak et al., 2001); in relation to the discipline of economics it was found that, while the increase in the level of education of respondents significantly improves wages, benefits and productivity; regarding to the discipline of sociology and psychology was proved, both high perceptions of rewards received by professors, as well as high perceptions of support affective capital were negatively correlated with intention to leave University. Findings were fully consistent with the concept of opportunity cost, since the decision to stay or to leave

was affected by the perceptions of professors regarding the rewards received and organizational support to affective capital (Thirlby, 1946).

Table 3

Comparison of Clusters on the Moderating Effect of the Opportunity Cost of the Professor in the Relationship Between Intrinsic Rewards and Intention to Leave the University

	Cluster 1	Cluster 2	Cluster 3
Percentage	38,1	28,6	33,3
Age	31-40	41-50	31-40
Salary	3 to 5 million	5 to 8 million	5 to 8 million
Experience	5 or more	5 or more	5 or more
Marital status	Married	Married	Single
Type of University	Private	Private	Private
Contract	Permanent	Permanent	Fixed-term
High-quality institutional accreditation	No	Yes	Yes
Type of job	Professor / researcher	Professor / researcher	Professor / researcher
N° articles	2	0	0
Genre	Female	Male	Male
Level of education	Master	Master	Master
Tenure	5 or more	5 or more	5 or more
I feel that it is easy to receive from my boss ideas to improve my work	Low 1	High 6	High 5
I know exactly what is expected of me in my job	Acceptable 4	High 6	High 7
My boss asked my opinion when a problem arises	Low 1	High 6	High 6
My work get me the opportunity to act freely in the way I do it	High 5	High 6	High 7
I receive continuing training to provide a good job	Low 2	Low 3	High 5

Findings in each of the constructs were associated with research needs expressed by academics, specifically: extrinsic rewards (Campbell et al., 2012; Juma & Lee, 2012; Newman & Sheikh); intrinsic rewards (Juma & Lee, 2012; Newman & Sheikh, 2012); human capital (Martín, 2011); opportunity cost (Greenberg & Spiller, 2015; Yip, 2014); where to (Campbell et al., 2012); including a moderator variable in employees´ mobility studies (Cotton & Tuttle, 1986, Griffeth et al., 2000).

Findings confirmed the recommendations of Juma and Lee (2012) related to the importance of extrinsic and intrinsic rewards in the perception of employees, and its contribution in reducing the likelihood of employee leaving the organization. In addition, the

results allow help in research related to the generation of value for the organization, that associate the positive results by them, they are highly correlated with organizational rewards as demonstrated (Shaw et al., 2005).

Results about the relationships between extrinsic and intrinsic rewards on employees´ mobility intentions confirmed findings of Subramanian and Shine (2013), and Foong-Ming (2008) regarding the negative relationship between this relationships; however, results of this study are more consistent with the findings of Subramanian and Shine (2013) since the correlations were strong. Results by Subramanian and Shine (2013) allowed them to conclude that employees would not consider alternatives offered by other organizations, given the high correlation obtained by them 86.8%, while Foong-Ming (2008) was 29%. The findings of this study ranging between 61.97% and 71.06% mean that professors of higher education institutions could consider or not, other alternatives offered by other organizations.

Regarding the results on human capital, they confirmed previous studies that showed a negative relationship between human personal capital and turnover intention (Chatman, 1991; Kristof-Brown et al., 2005; Verquer et al., 2003; Wheeler et al., 2005, 2007; Yu-chen, 2015).

Regarding the methodology and data analysis, it is concluded that the analysis of the results coincided with the central argument of positivism, which defines that reality can be perceived by the senses, and following the positivist philosophy data allowed to observe the actually, make predictions, find regularities, and even possible causal relations, literature review identified the quantitative nature of the study, review multiple models of relationships between constructs and choose the most appropriate statistical technique second generation, such as *PLS* it possible to analyze the reality of University professors as it happens, creating a complex pattern of relationships between the constructs proposed in the model (Gefen et al., 2000). The findings confirmed the descriptive and explanatory nature of the research because

the proposed model allowed to explain the intentions of staying or leaving the University to depend on the perceptions of professors, about the rewards they receive, and also these relationships affected by the opportunity cost of the professor.

Findings are of particular importance, relevance and meaning for different stakeholders related to higher education. First, for rectors, deans and directors at universities, it is remarkable to note that the success harvested universities depend on to a large extent on the quality of their professors. Best professors are attracted and retained by institutions depending on the quality organizational support provided to them, and perceptions they have about what they receive from the organization, in return for delivering knowledge and commitment, compared to the three primary functions that take place in universities, teaching, research, and extension. Second, for professors and researchers, it is an important study for them because being themselves subjects of the investigation; it is a comprehensive study related to their needs conducted for the first time in Colombia. It considered topics such as working conditions, satisfaction salary, satisfaction with benefits, promotion opportunities, role clarity, skill variety, autonomy, feedback, training, participation in decision-making, and organizational support to human capital, specifically, intellectual, social, and affective capital; taking into account the opportunity cost of the professor. Third, it is important to the community because it makes known to the general public and political leaders, the factors that contribute most to the achievement expected of professors, not only as knowledge workers, but also as trainers of professionals, and agents of change in society.

About the assumptions, the results of the global model interactions between variables were expressed, and how changes in one of them immediately generated changes throughout the system. Could statistically verify the butterfly effect (Barak et al., 2001). It was right to take the recommendations to include a moderating variable in the study, so the results showed (Cotton & Tuttle, 1986; Griffeth et al., 2000). Considering that this study had a

predictive and causal approach, not including the explanation of causality is a void to be filled, for which a study of mixed character is recommended. The results allowed discovering that it was correct to assume that employees´ earnings were part of extrinsic rewards (Williamson et al., 2009). Social rewards had no impact on the results as assumed (Choi et al., 2012). It was also correct to assume that the opportunity cost of the professor was involved economic factors, but when they tried to include psychological costs, the results were statistically no significant (Voiculescu, 2009).

Regarding limitation, it should be acknowledged that the implementation of questionnaires as a tool to collect information is tedious for respondents because about 25% of the surveys were not useful. A quantitative study of people's perceptions caused difficulties in adjusting the model, and as these change over time, cannot draw conclusive results based only on predictions (Kammeyer-Mueller et al., 2005).

Regarding delimitations, the convenience sample and first-hand knowledge of the study population facilitated the development of the research in all its stages, and helped to reduce the chance of error, and select with relative success constructs involved in the model.

Implications

Findings go beyond the perception of professors, about the relationships between rewards received, the perceived organizational support to human capital, and employees´ mobility intentions. Because when it was incorporated into the model the opportunity cost of the professor as a moderating variable of the relationships between rewards and employees´ mobility intentions; it decision allowed to discover that the interests and needs of professors vary according to the perception they have of their opportunity cost. Making it a useful model in the decision-making by managers, enabling them, not only to address the particular needs of their professors, socially recognized as high-performance workers in organizations with

intensive use of knowledge; but also develop strategies that explicitly incorporate the dimensions studied into the organizational strategic plans and the corporate vision.

Also, findings contributed to the research related to the generation of value in universities, mainly about institutional actions aimed at national and international quality accreditation, which give a significant prevalence to the assurance of learning, and the quality of professors. Activities that go beyond retention of high-performance professors, and guarantee a commitment to actions of teaching, extension, and research. Activities developed by the faculty reflected among others on the quality of the programs offered, obtained international recognition, the quality and quantity of research groups, and the impact generated by the University in their local environment. These actions creating value for universities are highly correlated with organizational rewards as demonstrated (Shaw et al., 2005).

In developed countries, Universities contribute in a relevant way with the productive sector in research and development. There is evidence that countries with higher levels of development have developed public policies and investment translated into plans, programs, and projects that have enabled linking state, academia, and business, focused on innovation and generating relevant synergies that have resulted in the creation of new products and services associated with the knowledge society. Experiences in this regard, such as those developed in the United States, Israel, Germany, Japan, India, etc., show the way towards the generation of new opportunities for Latin American linked to the production of valuable knowledge to the international community. It is a work done by people and begins in classrooms and laboratories with the support of high-performance workers, as a University professors.

Recommendations

It is highly recommended for managers that within the value creation strategies of organizations dedicated to education, the intentional inclusion of extrinsic and intrinsic rewards, commensurate with local needs of employees. Also, projects and support organizational strategies are based primarily on the perceptions of employees, and not only in the external search and copy of "best practices" implemented in other organizations. Also, it is desirable for managers to use the model proposed in this research, and also the instrument applied better to understand the needs and interests of their professors, that will serve as input to improve strategic plans and key strategies for organizations with intensive use of knowledge, taking into account the manifest variables that were most valued by the professors. Similarly, it is important for managers of universities incorporating into the development plans, strong links with the productive sector so that all academic programs were based on meeting the real needs of growth, development, and sustainability.

The decision to leave the University rather than to stay, results in lower evaluations of staying at the University, specifically, choosing to exit the organization rather than to stay in it, would lead to lower evaluations of staying than would leave rather than choose to not leaving. For this reason, it is critical that managers deepen in the knowledge of local factors involved in the opportunity cost of the employees so that focus organizational efforts in satisfying them, to minimize the loss of valuable human capital.

For future research it is recommended to focus on explaining, why the phenomenon of employees´ mobility intentions occurs, under what conditions this event occurs, why two or more constructs are related; for these reasons conducting an investigation of mixed character is recommended.

Findings suggest that in future research, it is important to consider a set of manifest variables, that directly moderates the relationship between the decision to have left the

University, and the new labor reality of the professor, either that he/she has created a company, or he/she has been linked with another organization in the same sector or another; taking into account a difference of no more than one year from the time the professor resigned from the University for which he/she worked.

Deepen the moderation of the opportunity cost of the employee; it is desirable that in future research, questions to make allow further explore the psychological costs in making decisions against the intention to leave the organization. The literature about the individual's opportunity cost is still cheap.

The moderate fit of the model may be due to small sample size, and is recommended to expand in future research, and involve professors from all areas of knowledge. In this sense, future research could examine whether the proposed model can be applied in other organizations with intensive use of knowledge, and even in different organizational structures. For improving the predictive quality of the proposed model, academics are invited to debug and enrich it.

Summary

The distinction between the perceptions of professors regarding both the rewards and the perceived organizational support to human capital, as well as the effect of the opportunity cost are important to achieve a better understanding of the intention to stay or leave the organization. The core and the most interesting finding is that by introducing the effect of opportunity cost, the decision to leave is not so clear, and the likelihood of leaving the University to get dropped.

The proposed model is an important contribution to knowledge because it allowed a comprehensive understanding of the most significant factors for the sample size studied, which are associated with the intention to leave the organization. The findings are consistent with previous studies. The focus of the researcher in identifying research needs identified by

scholars and investigative experience in the subject studied facilitated the construction of a model with a capacity of prediction moderate, and statistically significant.

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Appendix A: Informed Consent Form

Bogota, November 2015

Dear participant.

Subject: Questionnaire to measure the effect of the level of professional education in the turnover.

I present my greetings and thanks for your participation by answering the attached questionnaire, which is part of research conducted for the degree of Ph.D. in Strategic Management from the Catholic University of Peru and Doctor in Business Administration from the Maastricht School of Management of the Netherlands, with a thesis entitled "Employee Mobility & Human Capital in Higher Educational Level. The Moderating Role of the Opportunity Cost of the Employee on Employees´ mobility intentions.

Reply this questionnaire will take less than 10 minutes and the results of this study will be made available in April 2016. Data to be published will not be individualized, so that your name and your company are not considered as information for the study.

If you kindly answer the questionnaire, manifest their consent to participate in the research study. Awaiting your support and I welcome and am available for any questions of detail please contact me at the following email: carlos.hoyos@uexternado.edu.co

Without further. Regards.

Carlos Arturo Hoyos V.

Undergraduate Director in Business Administration

Universidad Externado de Colombia

Appendix B: Authorization for Use of Instruments

SL Choi

Dear Carlos,

Thank you for your interest in my research. I currently not able to provide you the questionnaires due to copyright issue. However, you can purchase the book on my research through Amazon.com including the instrument used.

http://www.amazon.ca/Effective-Leadership-Choi-Sang-Long/dp/3847347128

Regards

Malhotra, Neeru

Hello Carlos,

Thanks for your email.

Yes, this is fine with us. However, we had also adapted most of these scales from literature. So you might want to seek permission from the original sources, or cite them.

Best Wishes,

Neeru

****

Dr. Neeru Malhotra

Senior Lecturer in Marketing,

Aston Business School

Aston University, Birmingham, B4 7ET

Tel: +44-121-2043151

Dear Dr. Malhotra

Thank you for your answer.

Do you think if I quote the original sources, mentioning that I found in your paper, may be enough to be accepted by the jury of my RP?

Best regards,

Carlos Arturo Hoyos V.

Doctoral Student

2014-07-06 5:15 GMT-05:00 Malhotra, Neeru <n.malhotra@aston.ac.uk

---

Malhotra, Neeru

Yes, it should be fine. Also, look at other papers how people cite these scales and sources!

Best Wishes,

Neeru

****

Dr. Neeru Malhotra

Senior Lecturer in Marketing,

Aston Business School

Aston University, Birmingham, B4 7ET

Tel: +44-121-2043151

Martín Sierra, Celia

Estimado Carlos Arturo,

Lo primero, disculpa la demora en contestarte.

Lo segundo, muchas gracias por tus amables palabras y por tu interés por mi tesis doctoral. La gestión de personas en las organizaciones actuales tratando de desarrollar entornos satisfactorios para todas las partes me parece un tema apasionante.

Te comento, en relación a lo que me planteas (si me permites tutearte): Por mí no hay ningún problema en que utilices las escalas siempre que cites la autoría (de mi tesis doctoral), y comentes que están diseñadas basándose en estudios empíricos previos altamente contrastados: Capital intelectual (Youndt y Snell, 2004), capital social (Youndt y Snell, 2004; Collins y Smith (2006) y capital afectivo (diversas escalas de confianza y compromiso afectivo).

Espero que esto te pueda ayudar, y por favor, mantenme al tanto de cómo vas, estoy interesada en el tema que estás estudiando. Me parece muy interesante. Cuando puedas, ¿me podrías contar algo más? O si necesitas ayuda con algo, aquí estoy.

Un placer saludarte, y nuevamente, gracias por tu interés y honestidad escribiéndome.

Un abrazo,

Celia

Profesora del Departamento de Ciencias Sociales

Universidad Europea Miguel de Cervantes

cmartins@uemc.es

Appendix C: Official Translation

Luis Enrique GOMEZ V.
Official Translator
M.B.A – University of Dallas, Texas U.S.A.

Bogotá, D.C.
Colombia S.A.
November 20, 2015

Personal Information

Current Address	Calle 79 Nº 14 -33 Suite 504
Phone Number	(571) 610 2605
Mobile	(571) 313 272 6652
E-mail:	luisegomezv@hotmail.com
City	Bogotá, D.C.
Country	Colombia S.A.

Reference: "Questionnaire about the moderating role of the opportunity cost on employees´ mobility intentions in the Higher Education Level.

To Whom It May Concern

The undersigned Luis Enrique GOMEZ V., by means of the present instrument certify under penalty of perjury, the attached documents related to the above referenced instrument **"Questionnaire about the moderating role of the opportunity cost on employees' mobility intentions in the Higher Education Level,** as a true and correct translation from English into Spanish language. Likewise, state that I am a qualified, competent and authorized English – Spanish - English Official Translator and Interpreter as certified through Resolution Nº 283 dated March 3, 1988, granted by the Ministry of Justice of the Republic of Colombia, duly sworn, appointed and registered before the corresponding authorities in Colombia S.A.

Likewise, the present statement serves as confirmation of a faithful translation of the document submitted by **Dr. Carlos Arturo HOYOS V**.

Certification given on this, November 20, 2015 in the city of Bogotá, D.C. Colombia S.A.

Luis Enrique Gomez V. Official Translator
Resolution 283/88 Ministry of Justice
Republic of Colombia, S.A.

Luis Enrique GOMEZ V.
Official Translator
Ministry of Justice - Republic of Colombia.

Luis Enrique GOMEZ V.
Official Translator
M.B.A – University of Dallas, Texas U.S.A.

Bogotá, D.C.
Colombia S.A.
November 20, 2015

Personal Information

Current Address	Calle 79 Nº 14 -33 Suite 504
Phone Number	(571) 610 2605
Mobile	(571) 313 272 6652
E-mail:	luisegomezv@hotmail.com
City	Bogotá, D.C.
Country	Colombia S.A.

Reference: "Cuestionario – Rol Moderador del Costo de Oportunidad en las intenciones de Permanencia/Retiro de los Profesores en la Educación Superior"

To Whom It May Concern

The undersigned Luis Enrique GOMEZ V., by means of the present instrument certify under penalty of perjury the attached documents related to the above referenced instrument **"Cuestionario – Rol Moderador del Costo de Oportunidad en las intenciones de Permanencia/Retiro de los Profesores en la Educación Superior"** as a true and correct translation from Spanish into English language. Likewise, state that I am a qualified, competent and authorized English – Spanish - English Official Translator and Interpreter as certified through Resolution Nº 283 dated March 3, 1988, granted by the Ministry of Justice of the Republic of Colombia, duly sworn, appointed and registered before the corresponding authorities in Colombia S.A.

Likewise, the present statement serves as confirmation of a faithful translation of the document submitted by **Dr. Carlos Arturo HOYOS V.**

Certification given on this, November 20, 2015 in the city of Bogotá, D.C. Colombia S.A.

Luis Enrique Gomez V. Official Translator
Resolution 283/88 Ministry of Justice
Republic of Colombia, S.A.

Luis Enrique GOMEZ V.
Official Translator
Ministry of Justice - Republic of Colombia.

TRANSLATION SERVICE

OFFICIAL TRANSLATOR CERTIFIED BY MINISTRY OF FOREIGN AFFAIRS COLOMBIA

BOGOTA - COLOMBIA

CERTIFICATION

I hereby certify that the attached is to the best of my knowledge and believe, a true and accurate translation into English of the attached documents in Spanish.

William Triana Moreno
Official Translator
Resolution No. 0704
MINISTRY OF JUSTICE 1996

William Triana Moreno
Translation made on July 10th, 2014.
e-mail: angwie70@hotmail.com

Appendix D: Questionnaire Validation Tests

The adjustment was made specifically with the dimensions that operationalize the human capital construct, it was taken from the Intellectus Model (Universidad Autónoma de Madrid, 2011); however, the results of this test on each of the dimensions evaluated were as follows: for the dimension "values and attitudes" a *Cronbach's alpha* was 0.451; for the dimension "skills" a *Cronbach's alpha* was 0.823; and for the dimension "capabilities" a *Cronbach's alpha* was 0.642. Because two of the three results did not allow validate the dimensions and the operationalization of the construct human capital, then based on the literature and their operationalization dimensions had to be redesigned. To operationalize construct human capital were taken as dimensions: intellectual capital, social capital and affective capital proposed by Gratton & Ghoshal (2003) and Barney & Clark (2007), and operationalized in the investigation of Martín (2011) as it explained in Chapter 2.

Appendix E: Econometric Estimations

In this section the reader will find all econometric estimations mentioned above in Chapter 4 and 5.

Table E1

Characterization of Respondents

Control variable	Percentage Distribution
Character of the University	public (33.6%), private (66.4%).
Position held	professor (68.7%), director (22.1%), dean (9.2%).
Tenure	1 to 3 years (22.1%), 3 to 5 years (15.3%), five or more years (62.6%).
Experience	1 to 3 years (4.6%), 3 to 5 years (6.9%), five or more years (88.5%).
Number of articles in the last year	0= (30.5%), 1= (23.7%), 2= (29%), 3= (9.2%), 4= (4.6%), 5= (2.3%), and 6= (0.8%).
Age	21 to 30 years old (5.3%), 31 to 40 years old (26%), 41 to 50 years old (35.1%), 51 or more years old (33.6%).
Genre	male (64.9%), female (35.1%).
Civil status	single (23.7%), married (54.2%), cohabiting (12.2%), divorced (7.6%), widowed (2.3%).
Level of education	master degree (69.5%), Ph.D (30.5%).
Salary	1 to 3 million of COP (13%), 3 to 5 million of COP (37.4%), 5 to 8 million of COP (28.2%), 8 to 10 million of COP (15.3%), more than 10 million of COP (6.1%). The representative market rate of the US dollar for April 29, 2016 in Colombia was priced at: COP 2885.72 for one US dollar.
Institutional accreditation	yes (65.6%), no (34.4%).
Type of contract	permanent (51.1%); fixed-term (48.9%).

Table E2

Distribution of Manifest Variables in the Model Proposed by the Latent Variables.

Latent variable	Opportunity Cost	Extrinsic Rewards	Intrinsic Rewards	Human Capital	Employees´ Mobility Intention	Where to
N° Manifest variables	10	10	18	17	3	1
Type	Mod.	Exo.	Exo.	Exo.	End.	End.
Invert the sign	No	No	No	No	No	No
Deflación	External	External	External	External	External	External
Manifest variable	Org.Status	ER.WC1	IR.RC1	HC.IC1	EMI1	Activity
	Job	ER.WC2	IR.RC2	HC.IC2	EMI2	
	Tenure	ER.PS1	IR.RC3	HC.IC3	EMI3	
	Experience.	ER.PS2	IR.RC4	HC.IC4		
	N°Articles	ER.SB1	IR.SV1	HC.IC5		
	Age	ER.SB2	IR.SV2	HC.SC1		
	LevelEducation	ER.PO1	IR.SV3	HC.SC2		
	Salary	ER.PO2	IR.AT1	HC.SC3		
	Accreditation	ER.PO3	IR.AT2	HC.SC4		
	T.Contract	ER.PO4	IR.AT3	HC.SC5		
			IR.FB1	HC.SC6		
			IR.FB2	HC.AC1		
			IR.TR1	HC.AC2		
			IR.TR2	HC.AC3		
			IR.TR3	HC.AC4		
			IR.PDM1	HC.AC5		
			IR.PDM2	HC.AC6		
			IR.PDM3			

Table E3

Composite Reliability. Importance of Manifest Variables in the Model Proposed by the Latent Variables.

Latent Variable	Dimensions	Cronbach´s Alpha	Rho of D.G. (PCA)	Condition Number	Critical Value	Eigenvalues
Opportunity Cost	10	0.8721		23.719	1	22.432
						15.484
						12.299
						11.819
						0.8934
						0.8305
						0.6786
						0.5428
						0.4527
						0.3987
Extrinsic Rewards	10	0.9086	0.9255	96.234	1	55.964
						13.055
						0.8935
						0.7404
						0.5235
						0.394
						0.2228
						0.1366
						0.1269
						0.0604
Intrinsic Rewards	18	0.9185	0.9456	101.243	1	88.993
						19.694
						15.844
						13.608
						0.8132
						0.6378
						0.5431
						0.3713
						0.2998
						0.286
						0.2512
						0.1794
						0.1708
						0.1518
						0.1406
						0.1378
						0.1166
						0.0868
Human Capital	17	0.9028	0.9743	189.166	1	117.532
						19.606
						11.324
						0.4814
						0.3506
						0.2316
						0.1963
						0.1641
						0.1529
						0.1242
						0.1121
						0.0781
						0.0723
						0.0635
						0.0549
						0.0388
						0.0328
Employees´ Mobility Intentions	3	0.9141	0.9641	47.219	1	26.983
						0.1807
						0.121
Where to	1					

Table E4

Goodness of Fits (GoF) and R^2 for the Global Model

	GoF	GoF (Bootstrap)	Standard error	Critical reason (CR)	Lower Bound (95%)	Upper Bound (95%)
Absolute	0.3323	0.3446	0.0394	8.4229	0.2556	0.4218
Relative	0.6663	0.6416	0.0553	12.0407	0.5204	0.7471
Outer model	0.8625	0.8163	0.051	16.9256	0.6755	0.9182
Inner model	0.7725	0.7858	0.0437	17.6579	0.7011	0.8694

R² (Employees´ Mobility Intentions / 1)

R²	F	Pr > F	R² (Bootstrap)	Standard error	Critical reason (CR)	Lower bound (95%)	Upper bound (95%)
0.4934	40.908	0,0000	0.5738	0.0569	86.779	0.4502	0.6973

Table E5

Explanation Model: Employees´ Mobility Intentions from Extrinsic Rewards

R² (Employees´ mobility intentions / 1)

R²	F	Pr > F	R² (Bootstrap)	Standard error	Critical reason (CR)	Lower Bound (95%)	Upper Bound (95%)
0.4030	86.3892	0.0000	0.4753	0.0598	6.7399	0.3440	0.5975

Path coefficients (Employees´ mobility intentions / 1)

Latent variable	Value	St. Error	T	Pr > |t|	f²	Value Bootstrap	Standard error Bootstrap	Critical reason (CR)	Lower Bound (95%)	Upper Bound (95%)
Extrinsic Rewards	-0.6348	0.0683	-9.2946	0.0000	0.6749	-0.6880	0.0439	-14.4720	-0.7730	-0.5865

Table E6

Explanation Model: Employees´ Mobility Intentions from Intrinsic Rewards

R² (Employees´ mobility intentions / 1)

R²	F	Pr > F	R² (Bootstrap)	Standard error	Critical reason (CR)	Lower Bound (95%)	Upper Bound (95%)
0.3355	64.6235	0.0000	0.4785	0.0661	5.0783	0.3528	0.6119

Path coefficients (Employees´ mobility intentions / 1):

Latent variable	Value	St. error	T	Pr > |t|	f²	Value Bootstrap	Standard error Bootstrap	Critical reason (CR)	Lower Bound (95%)	Upper Bound (95%)

Intrinsic Rewards	-0.5792	0.0721	-8.0389	0.0000	0.5049	-0.6880	0.2648	-2.1877	-0.7822	0.6413

Table E7

Explanation Model: Employees´ Mobility Intentions from Human Capital

R² (Employees´ mobility intentions / 1)

R^2	F	Pr > F	R^2 (Bootstrap)	Standard error	Critical reason (CR)	Lower Bound (95%)	Upper Bound (95%)
0.4395	100.3482	0.0000	0.5356	0.0704	6.2437	0.3857	0.6749

Path coefficients (Employees´ mobility intentions / 1)

Latent variable	Value	St. error	t	Pr > |t|	f^2	Value Bootstrap	Standard error Bootstrap	Critical reason (CR)	Lower Bound (95%)	Upper Bound (95%)
Human Capital	0.6629	0.0662	10.0174	0.0000	0.7840	0.7302	0.0483	13.7259	0.6210	0.8215

Table E8

Fit for Extrinsic Rewards Structural Model through Opportunity Cost

R² (Extrinsic Rewards / 1)

R^2	F	Pr > F	R^2 (Bootstrap)	Standard error	Critical reason (CR)	Lower Bound (95%)	Upper Bound (95%)
0.6246	58.7602	0.0000	0.3937	0.0689	4.5673	0.2506	0.5416

Path coefficients (Extrinsic Rewards / 1)

Latent variable	Value	Standard error	t	Pr > |t|	f^2	Value Bootstrap	Standard error Bootstrap	Critical reason (CR)	Lower Bound (95%)	Upper Bound (95%)
Opportunity Cost	0.5609	0.0732	7.6655	0.0000	0.4591	0.6250	0.0551	10.1823	0.5006	0.7360

Table E9

Fit for Intrinsic Rewards Structural Model through Opportunity Cost

R² (Intrinsic Rewards / 1)

R^2	F	Pr > F	R^2 (Bootstrap)	Standard error	Critical reason(CR)	Lower Bound (95%)	Upper Bound (95%)
0.5482	62.2513	0.0000	0.4294	0.0721	4.5392	0.2677	0.5569

Path coefficients (Intrinsic Rewards /1)

Latent variable	Value	Standard error	T	Pr > |t|	f^2	Value (Bootstrap)	Standard error (Bootstrap)	Critical reason (CR)	Lower Bound (95%)	Upper Bound (95%)
Opportunity Cost	0.5720	0.0725	7.8900	0.0000	0.4863	0.6529	0.0564	10.1507	0.5174	0.7462

Table E10

Explanation Model: Where to from Employees´ Mobility Intentions

R^2 (Where to / 1)

R^2	F	Pr > F	R^2 (Bootstrap)	Standard error	Critical reason (CR)	Lower Bound (95%)	Upper Bound (95%)
0.2365	0.0405	0.8407	0.0153	0.0193	0.0164	0.0000	0.0794

Path coefficients (Where to /1)

Latent variable	Value	St. error	t	Pr > |t|	f^2	Value Bootstrap	Standard error Bootstrap	Critical reason (CR)	Lower Bound (95%)	Upper Bound (95%)
Employees´ mobility intentions	-0.0178	0.0884	-0.2013	0.8407	0.0003	-0.0128	0.1235	-0.1441	-0.2819	0.2005

Table E11

Fit the Structural Model for Employees´ Mobility Intentions, through External Rewards.

Intrinsic Rewards and Human Capital

R^2 (Employees Mobility Intention / 1)

R^2	F	Pr > F	R^2 (Bootstrap)	Standard error	Critical reason (CR)	Lower Bound (95%)	Upper Bound (95%)
0.4934	40.9080	0.0000	0.5738	0.0569	8.6779	0.4502	0.6973

Path coefficients (Employees Mobility Intention / 1)

Latent variable	Value	St. Error	T	Pr > |t|	f^2	Value Bootstrap	Standard error Bootstrap	Critical reason (CR)	Lower Bound (95%)	Upper Bound (95%)
Extrinsic Rewards	-0.2442	0.0955	-2.5575	0.0117	0.0519	-0.2124	0.0867	-2.8161	-0.4303	-0.0246
Intrinsic Rewards	-0.1110	0.0859	-1.2918	0.1988	0.0132	-0.1520	0.0921	-1.2052	-0.3536	0.0589
Human Capital	0.4328	0.0891	4.8543	0.0000	0.1870	0.4824	0.0780	5.5478	0.3193	0.6545

Impact and Contribution of the Variables to Employees' Mobility Intentions (Dimension 1)

	Human Capital	Intrinsic Rewards	Extrinsic Rewards
Correlation	0.6628	-0.5197	-0.6099
Path coefficient	0.4328	-0.111	-0.2442
Correlation * Coeficient	0.2868	0.0577	0.1489
Contribution to R^2 (%)	58.1278	11.692	30.1802
% acumulado	58.1278	69.8198	100

Table E12

Fit the Structural Model for Employees´ Mobility Intentions, through External Rewards.

Intrinsic Rewards and Human Capital. (Adjusted Model)

R^2 (Employees Mobility Intention / 1)

R^2	F	Pr > F	R^2 (Bootstrap)	Standard error	Critical reason (CR)	Lower Bound (95%)	Upper Bound (95%)
0.4827	30.6614	0.0000	0.4942	0.0676	6.2443	0.3719	0.6479

Path coefficients (Employees Mobility Intention / 1)

Latent variable	Value	St. Error	T	Pr > |t|	f^2	Value Bootstrap	Standard error Bootstrap	Critical reason (CR)	Lower Bound (95%)	Upper Bound (95%)
Extrinsic Rewards	-0.3787	0.0984	-3.8495	0.0002	0.1176	-0.3440	0.0982	-3.8573	-0.5766	-0.1028
Intrinsic Rewards	-0.1529	0.0931	-1.6422	0.1030	0.0214	-0.2340	0.0937	-1.6307	-0.4240	0.0054
Human Capital	-0.2057	0.0930	-2.2134	0.0287	0.0389	-0.2157	0.0846	-2.4325	-0.4317	-0.0145

Impact and Contribution of the Variables to Employees' Mobility Intentions (Dimension 1)

	Intrinsic Rewards	Human Capital	Extrinsic Rewards
Correlation	-0.6197	-0.6409	-0.7106
Path coefficient	-0.1529	-0.2057	-0.3787
Correlation * Coeficient	0.3845	0.4107	0.5049
Contribution to R^2 (%)	18.8288	26.13717	54.7995
% acumulado	18.8288	45.2005	100

Goodness of Fit (GoF) for the global model

	GoF	GoF (Bootstrap)	Standard error	Critical reason (CR)	Lower Bound (95%)	Upper Bound (95%)
Absolute	0.3268	0.3428	0.0344	9.5001	0.2821	0.4032
Relative	0.7852	0.6706	0.0554	12.3607	0.5624	0.8111
Outer model	0.8862	0.8447	0.0448	19.7764	0.7438	0.9301
Inner model	0.7732	0.7935	0.0425	18.1976	0.6958	0.8894

Appendix F: Results of Cluster Analysis

In this section, the reader will find figures showing the result of clusters for each of the measures relations in H1 to H5, and characterizing the population.

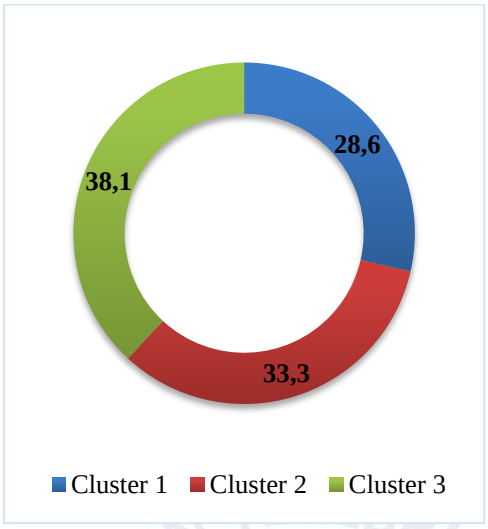

Figure F1. Perceptions of the extrinsic rewards received against the intention to leave the University.

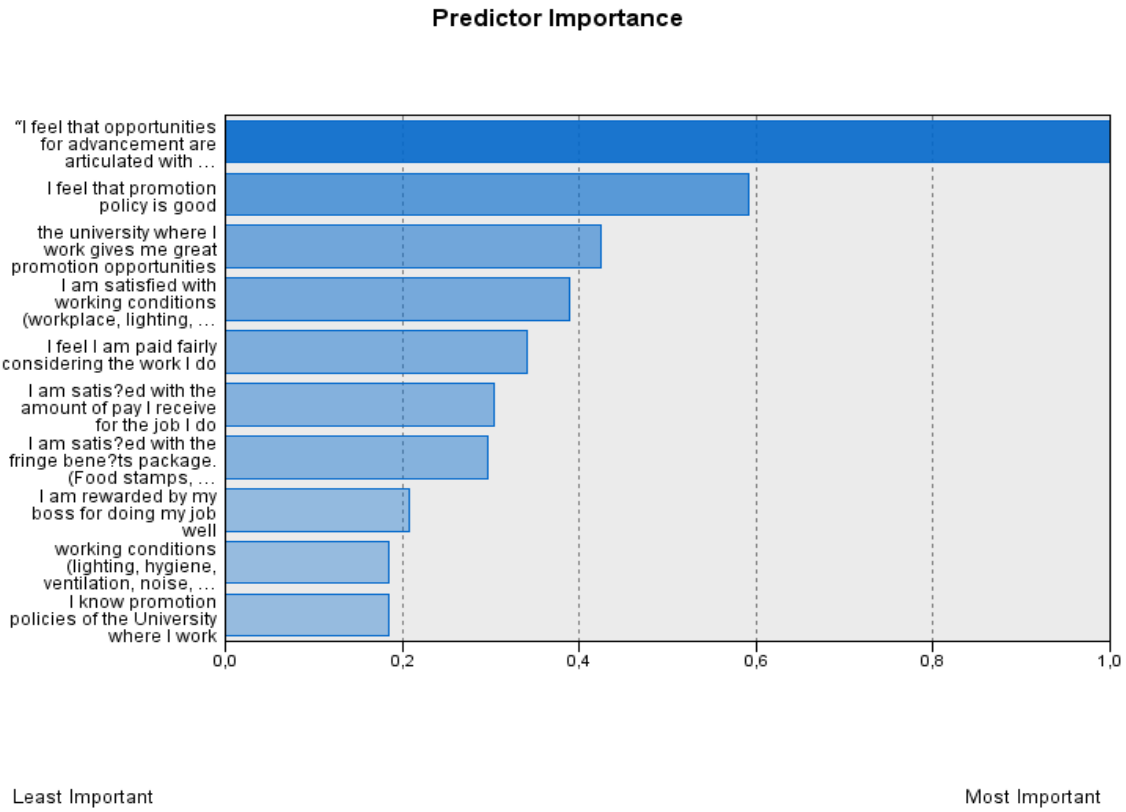

Figure F2. Predictor importance. Extrinsic rewards → Employees´ Mobility intentions.

Figure F3. Cluster 1 comparison. Extrinsic rewards → Employees´ Mobility intentions.

Figure F4. Cluster 2 comparison. Extrinsic rewards → Employees´ Mobility intentions

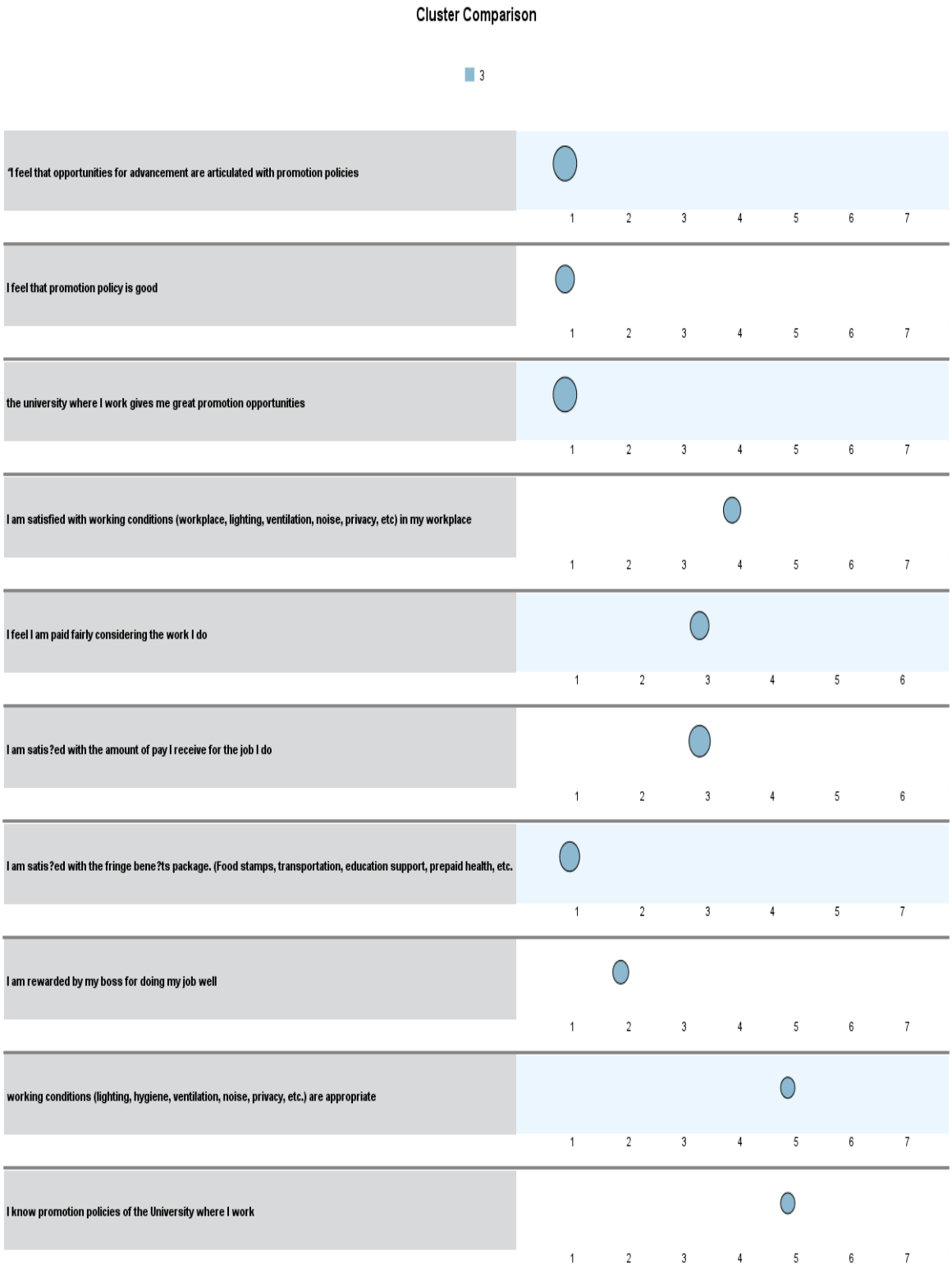

Figure F5. Cluster 3 comparison. Extrinsic rewards → Employees´ Mobility intentions

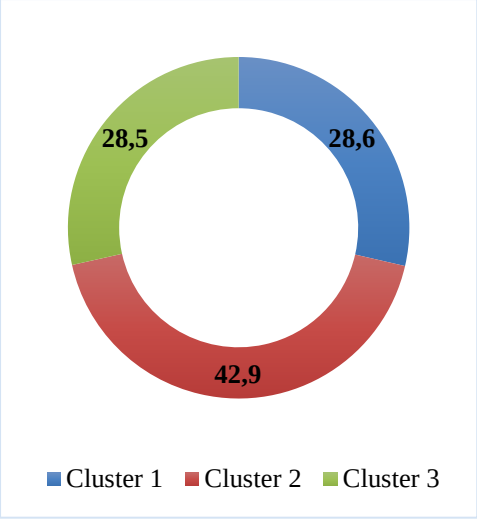

Figure F6. Perceptions of the intrinsic rewards received against the intention to leave the University.

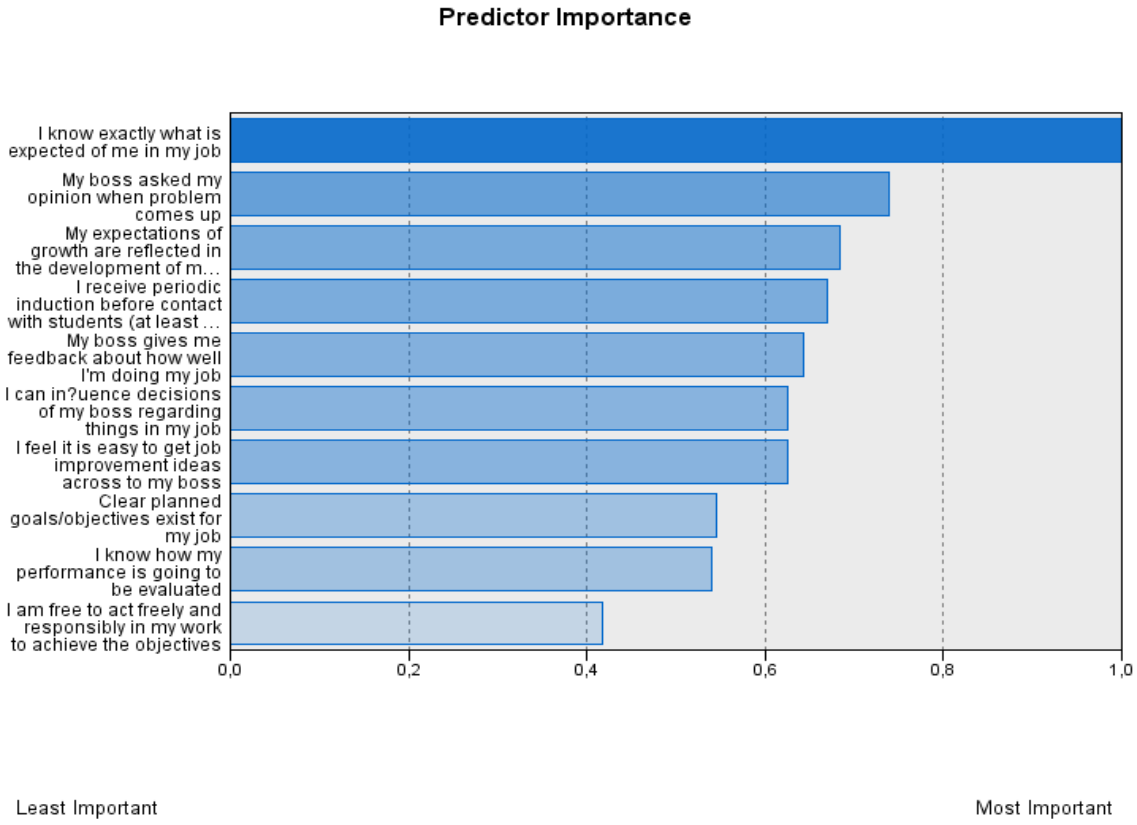

Figure F7. Predictor importance. Intrinsic rewards → Employees´ Mobility intentions

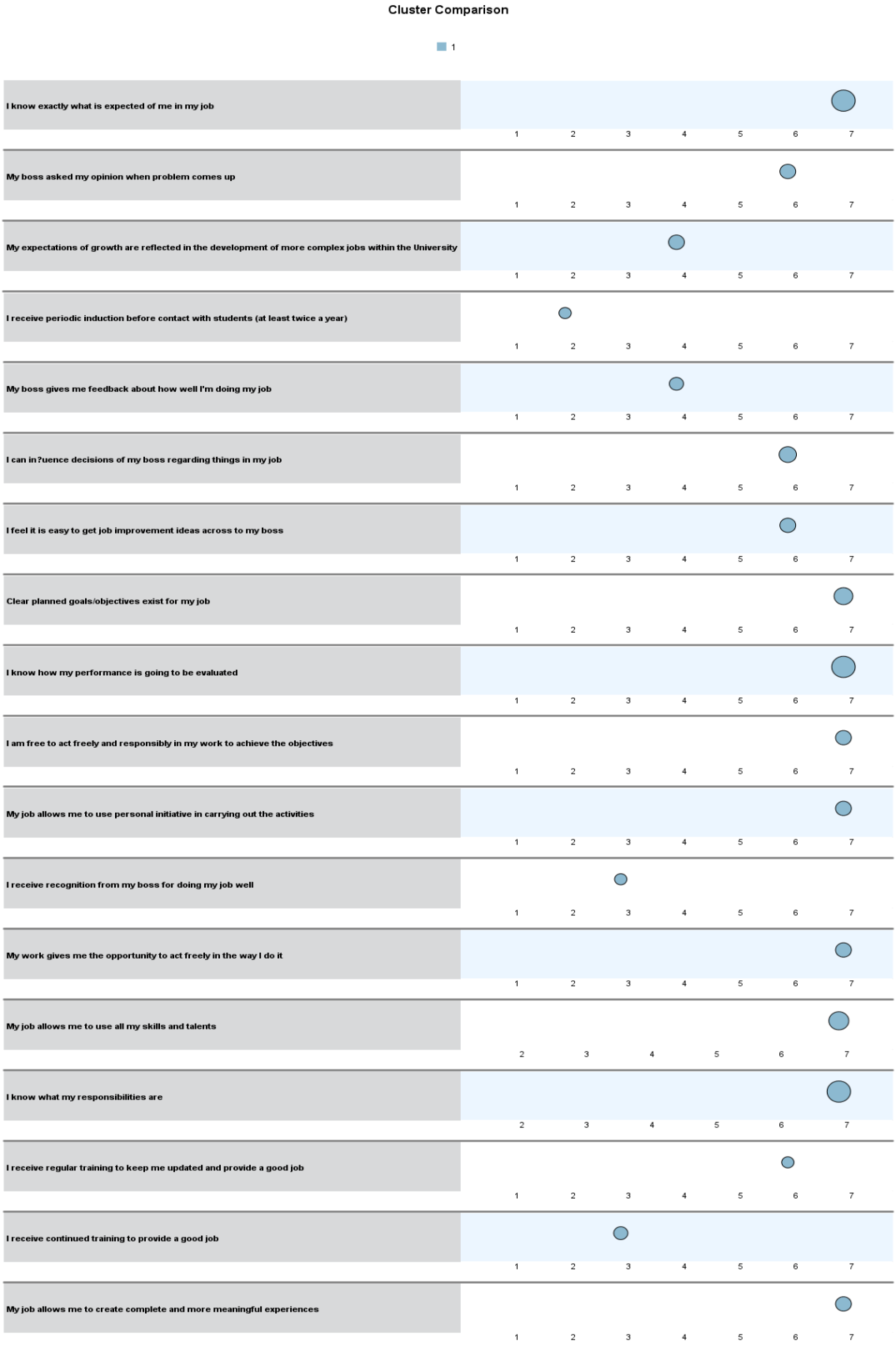

Figure F8. Cluster 1 comparison. Intrinsic rewards → Employees´ Mobility intentions

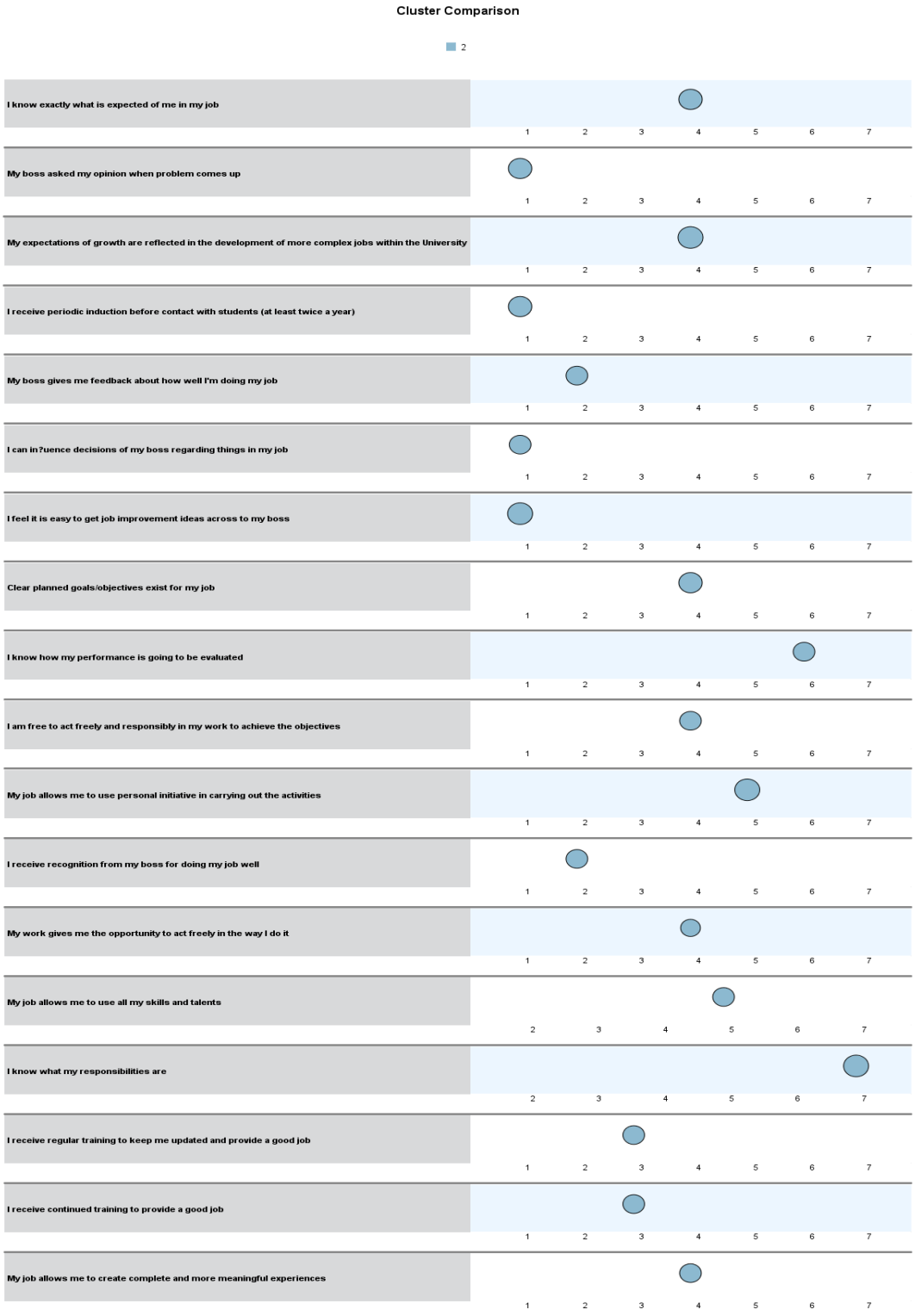

Figure F9. Cluster 2 comparison. Intrinsic rewards → Employees´ Mobility intentions.

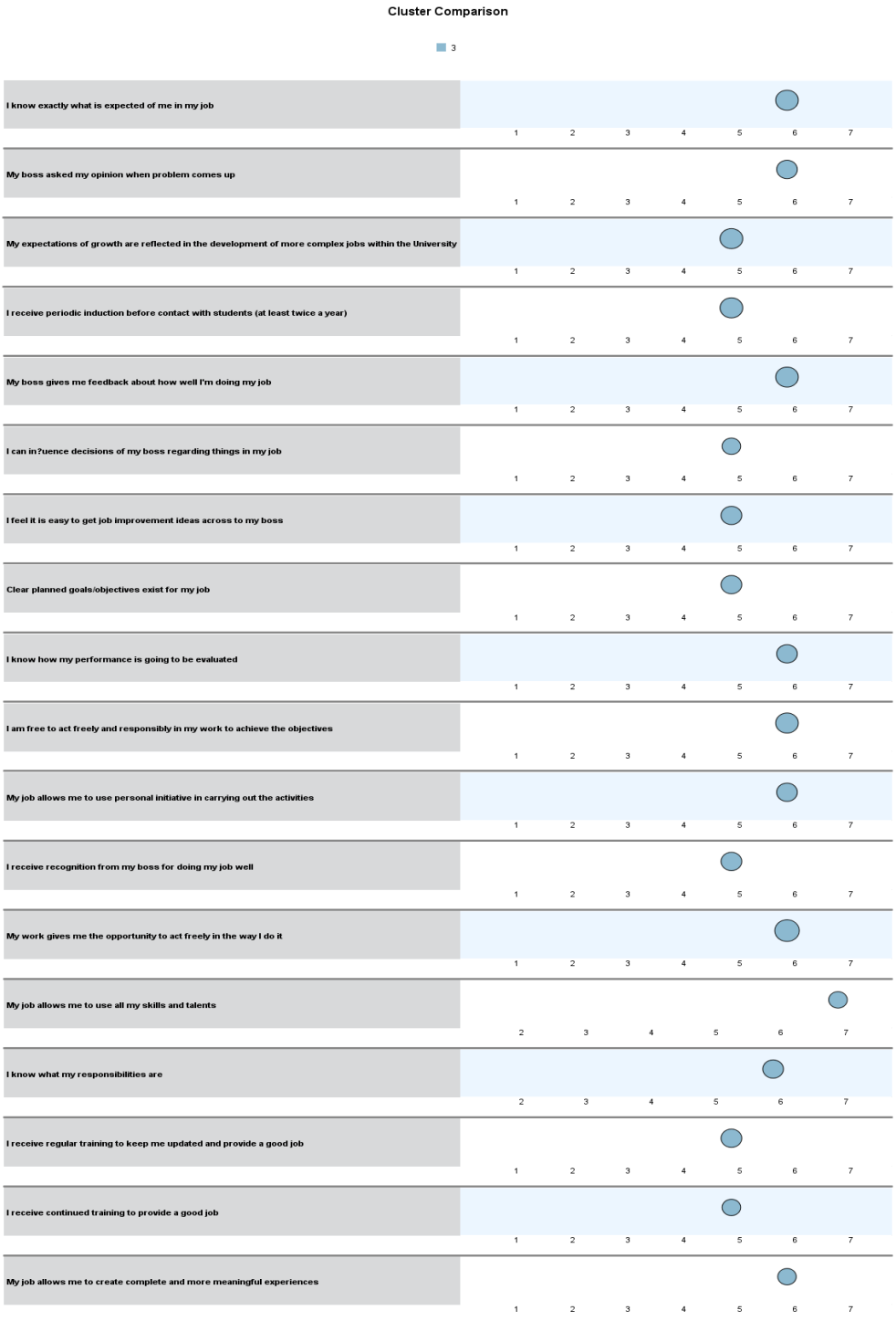

Figure F10. Cluster 3 comparison. Intrinsic rewards → Employees´ Mobility intentions

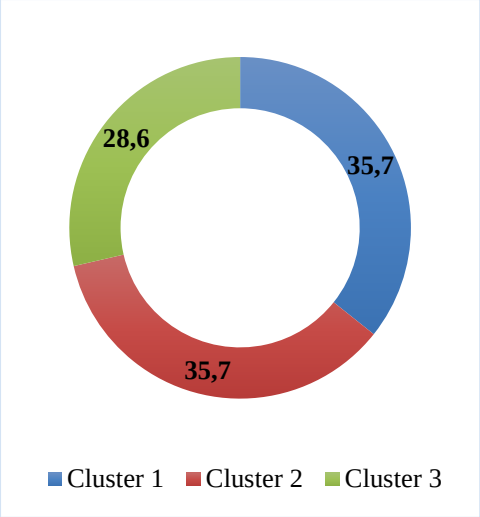

Figure F11. Perceptions of the support provided by the University Human Capital against the intention to leave the University.

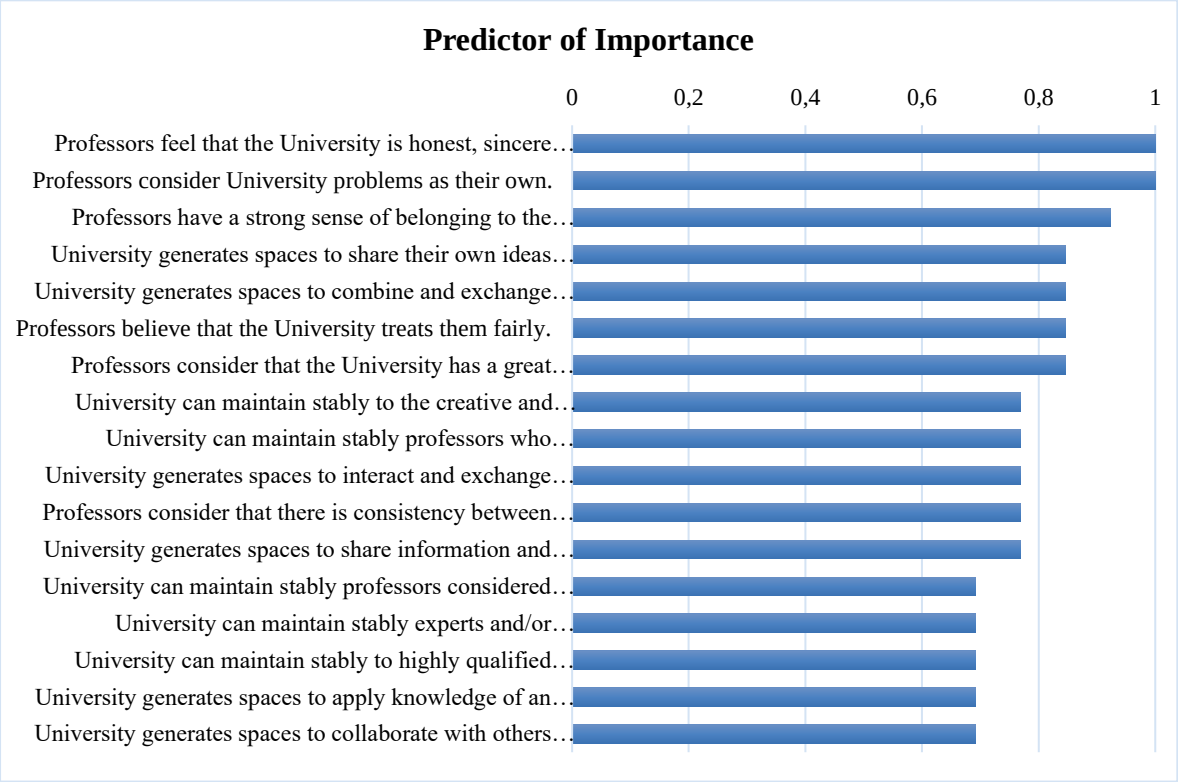

Figure F12. Predictor importance. Human capital → Employees´ Mobility intentions.

Figure F13. Cluster 1 comparison. Human capital → Employees´ Mobility intentions

Figure F14. Cluster 2 Comparison. Human Capital → Employees´ Mobility Intentions

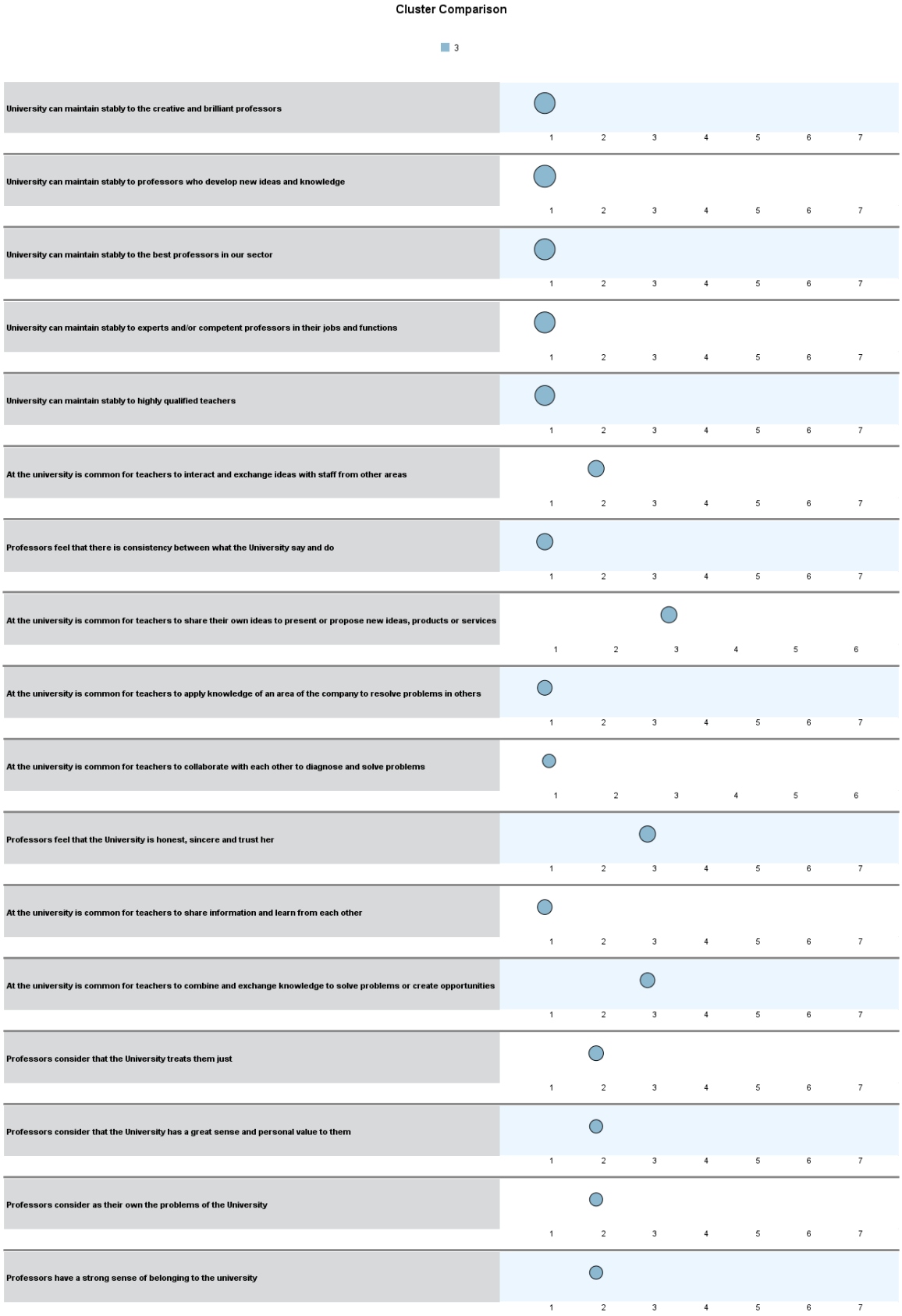

Figure F15. Cluster 3 comparison. Human capital → Employees´ Mobility intentions

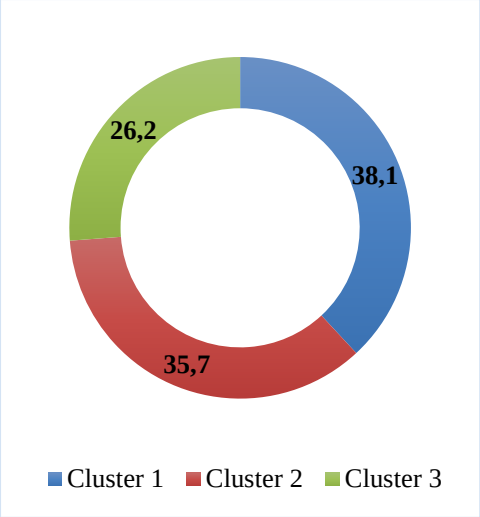

Figure F16. Perceptions of the moderating effect of opportunity cost on the relationship between extrinsic rewards and employees' mobility intentions.

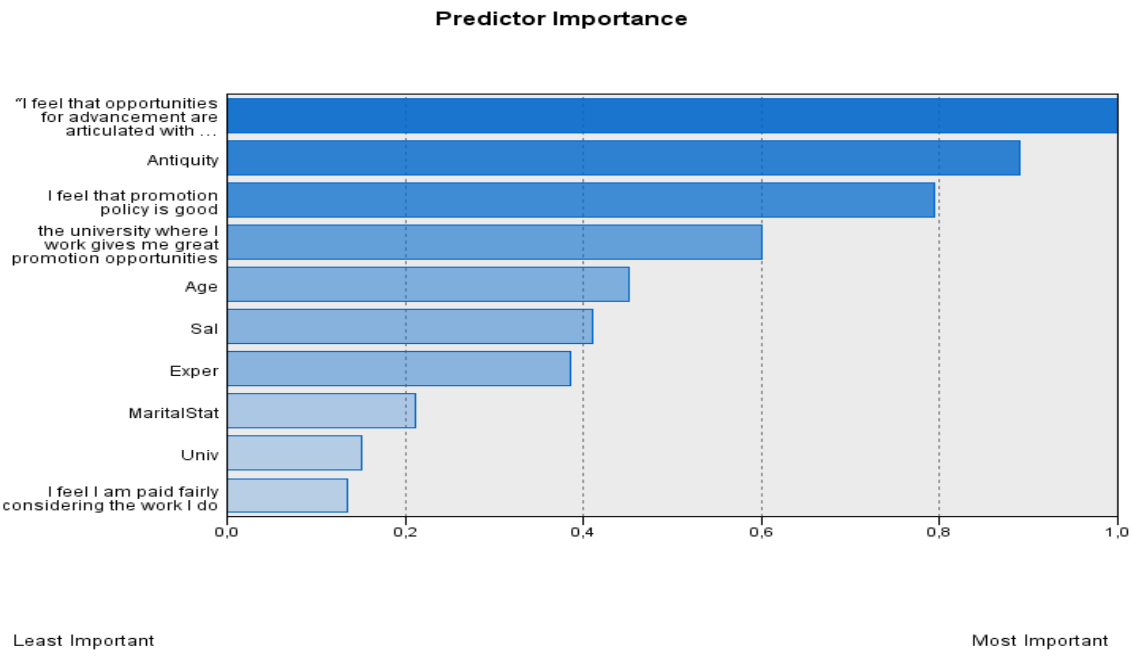

Figure F17. Predictor Importance. Moderating effect of the opportunity cost of the professor in the relationship between extrinsic rewards and employees´ mobility intentions.

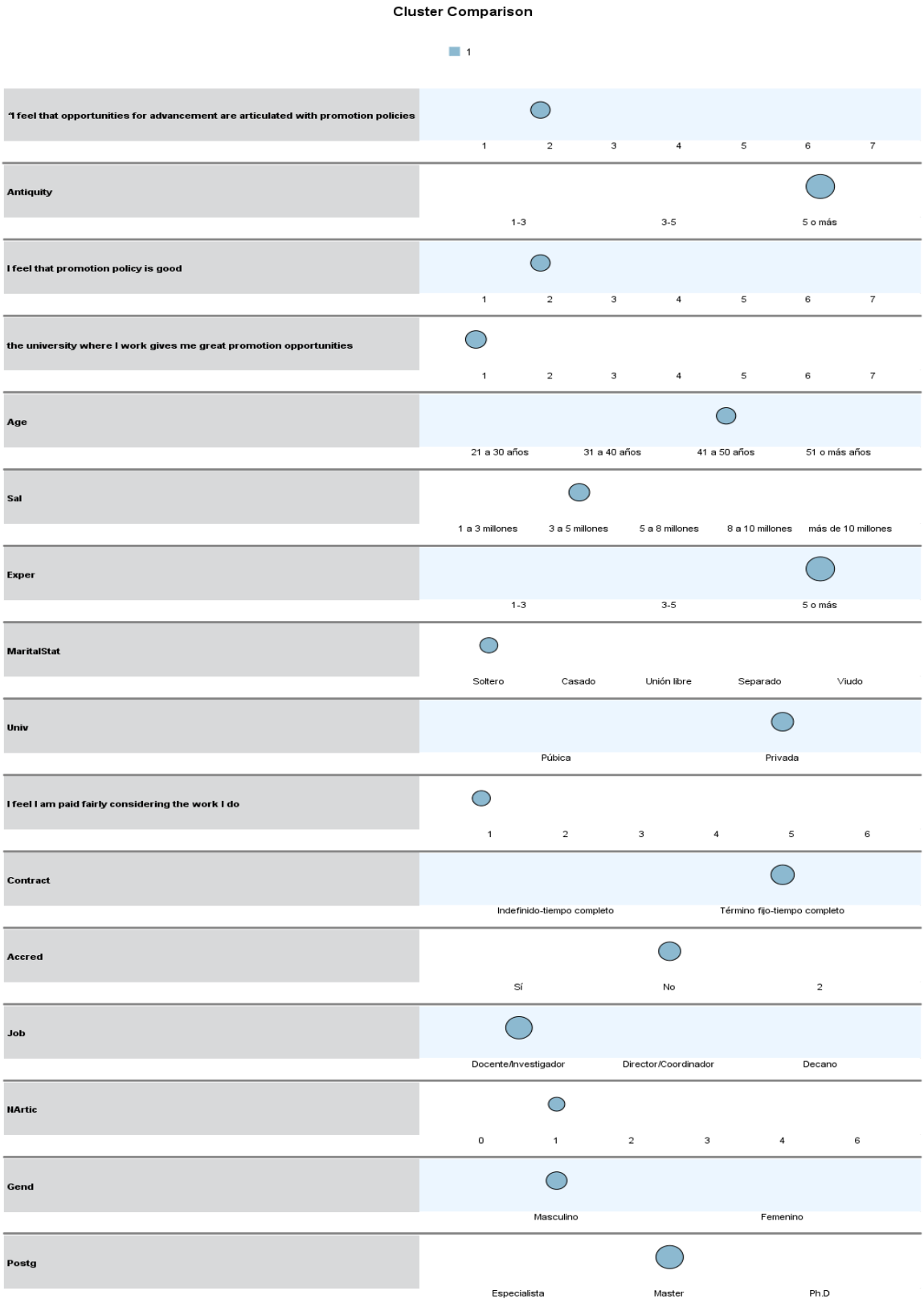

Figure F18. Cluster 1 comparison. Moderating effect of the opportunity cost in the relation Extrinsic rewards → Employees´ Mobility intentions

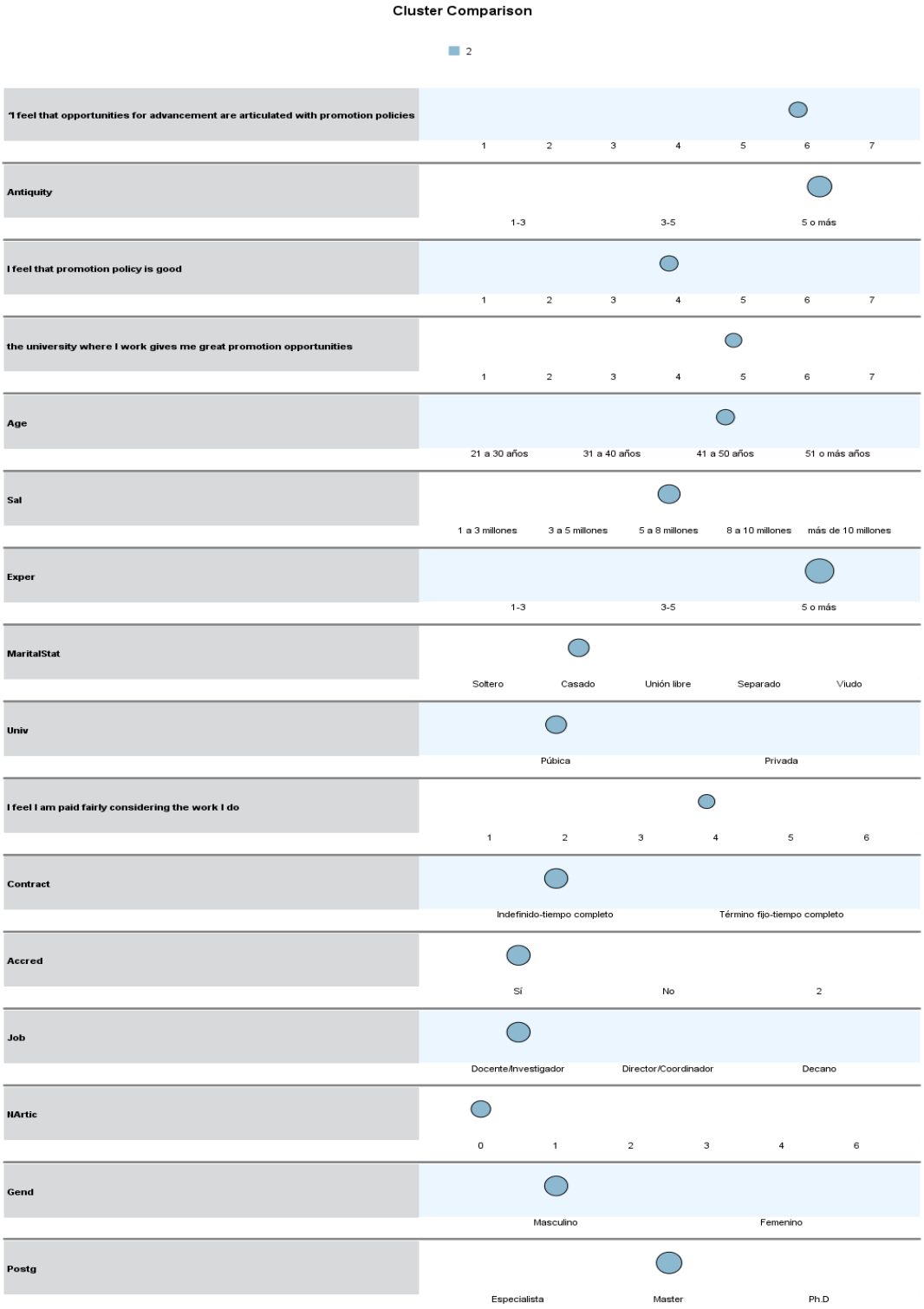

Figure F19. Cluster 2 comparison. Moderating effect of the opportunity cost in the relation Extrinsic rewards → Employees´ Mobility intentions.

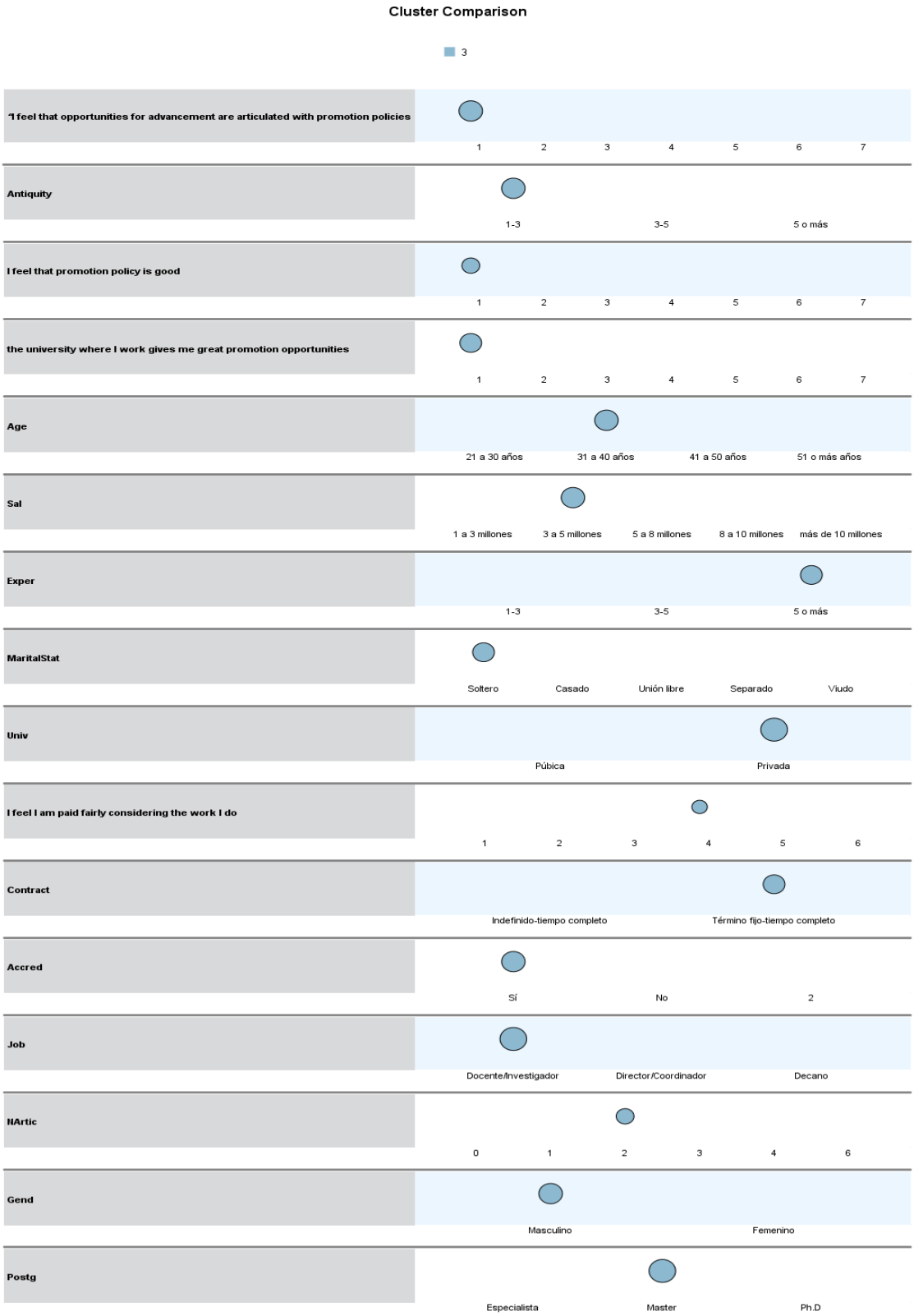

Figure F20. Cluster 3 comparison. Moderating effect of the opportunity cost in the relation Extrinsic rewards → Employees´ Mobility intentions.

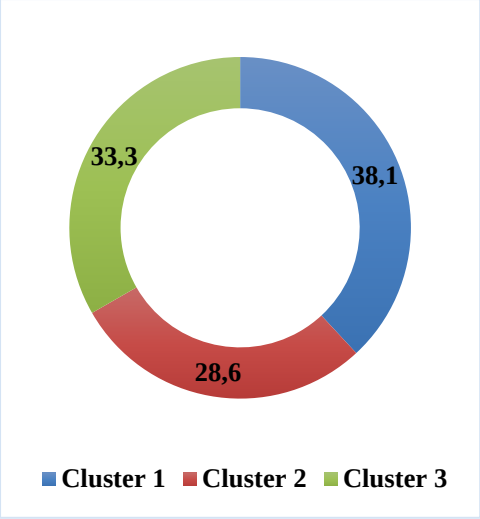

Figure F21. Perceptions of the moderating effect of opportunity cost on the relationship between intrinsic rewards and employees' mobility intentions.

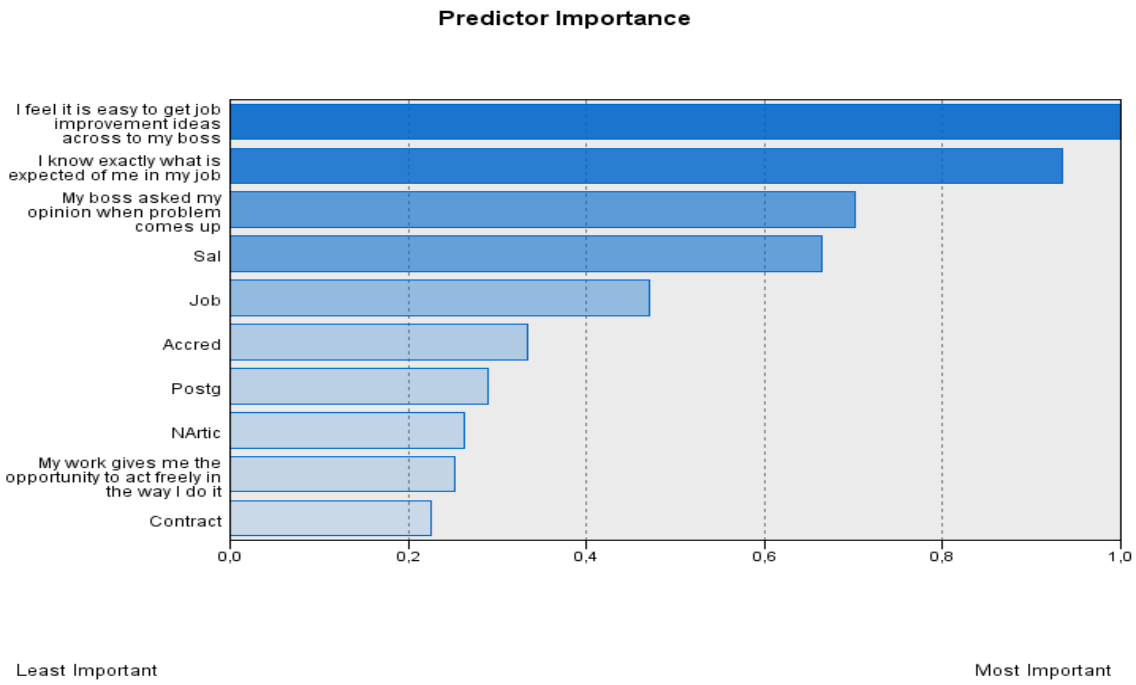

Figure F22. Predictor importance. Moderating effect of the opportunity cost of the professor in the relationship between intrinsic rewards and employees´ mobility intentions.

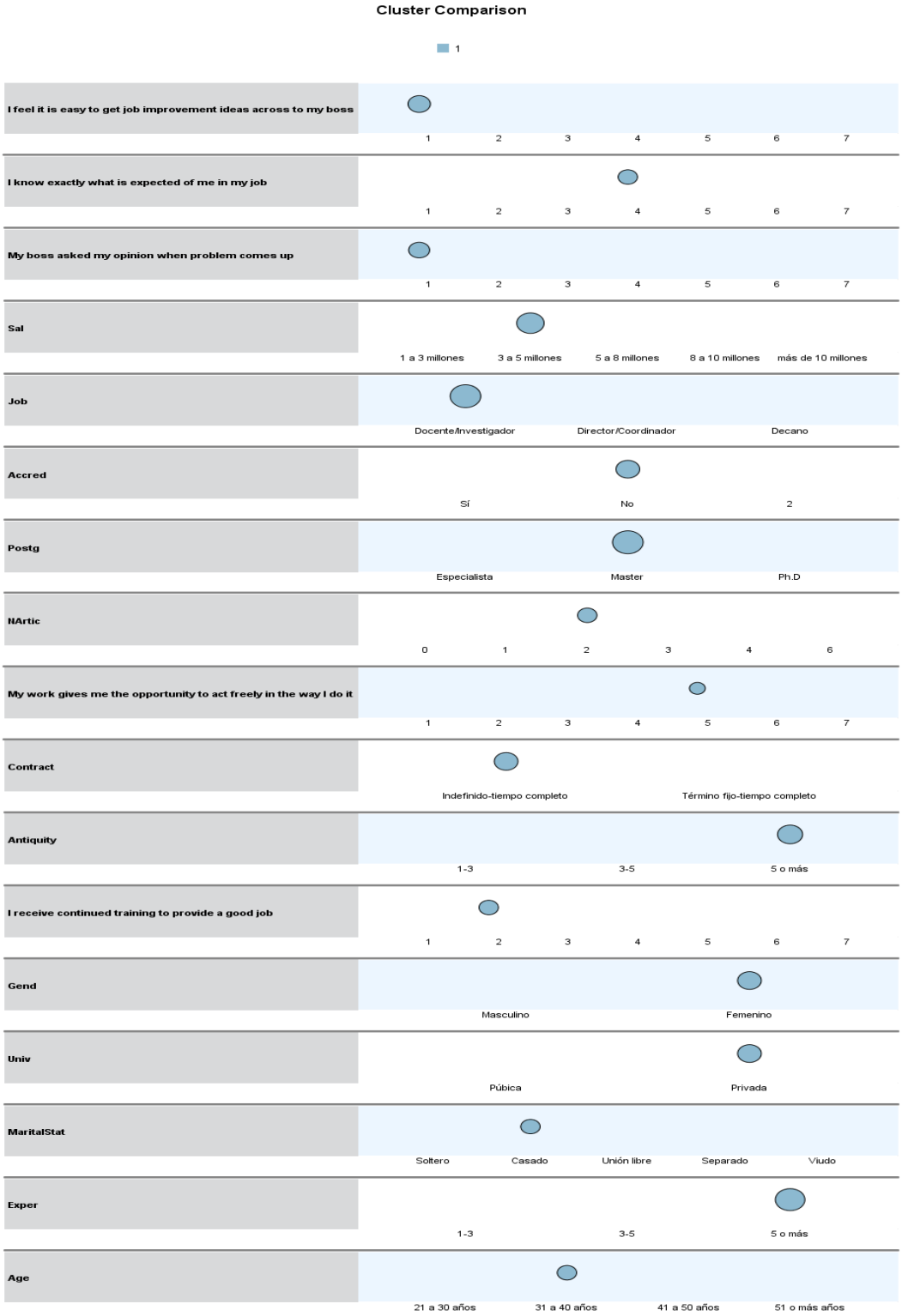

Figure F23. Cluster 1 comparison. Moderating effect of the opportunity cost in the relation Intrinsic rewards → Employees´ Mobility intentions.

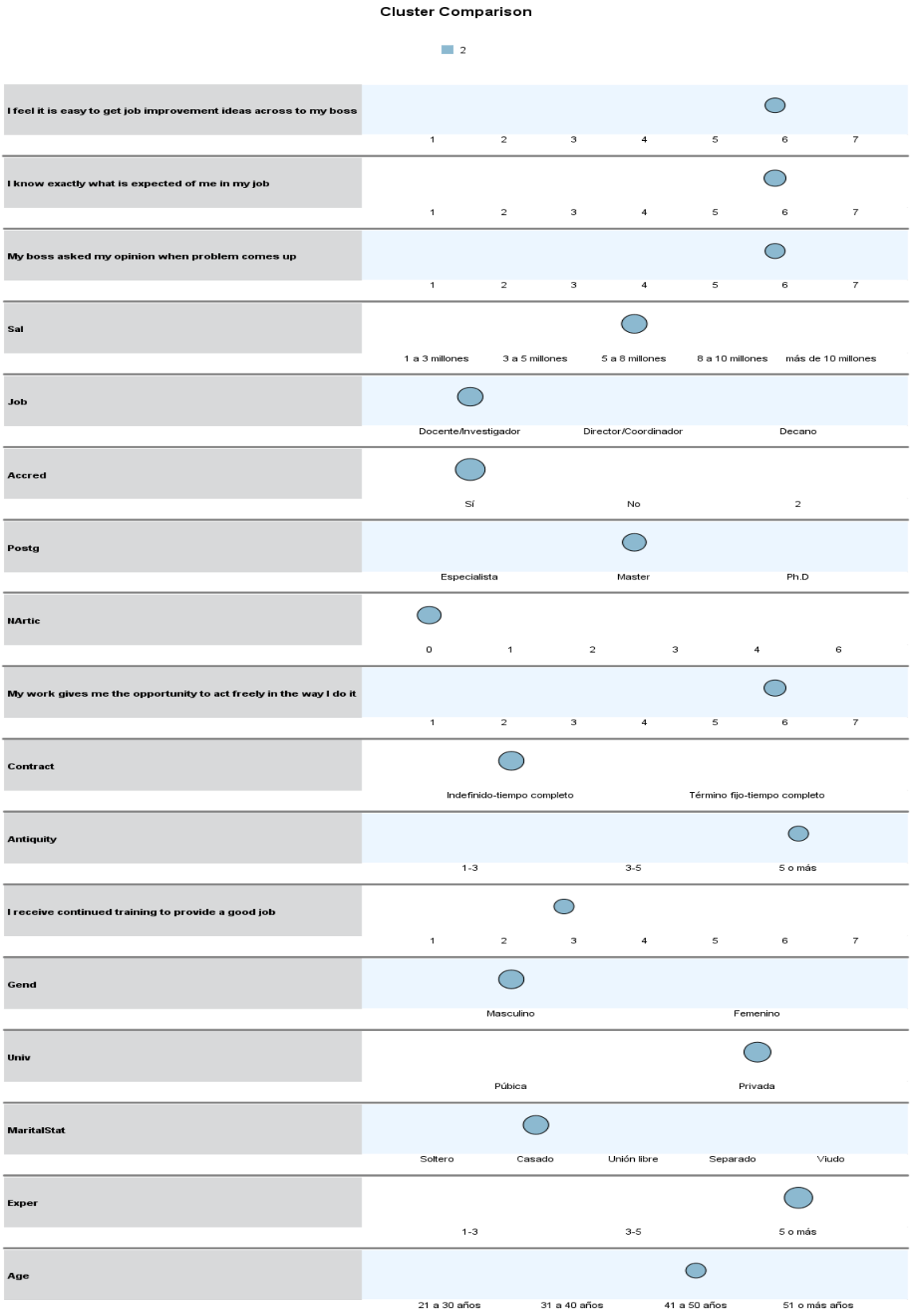

Figure F24. Cluster 2 comparison. Moderating effect of the opportunity cost in the relation Intrinsic rewards → Employees´ Mobility intentions

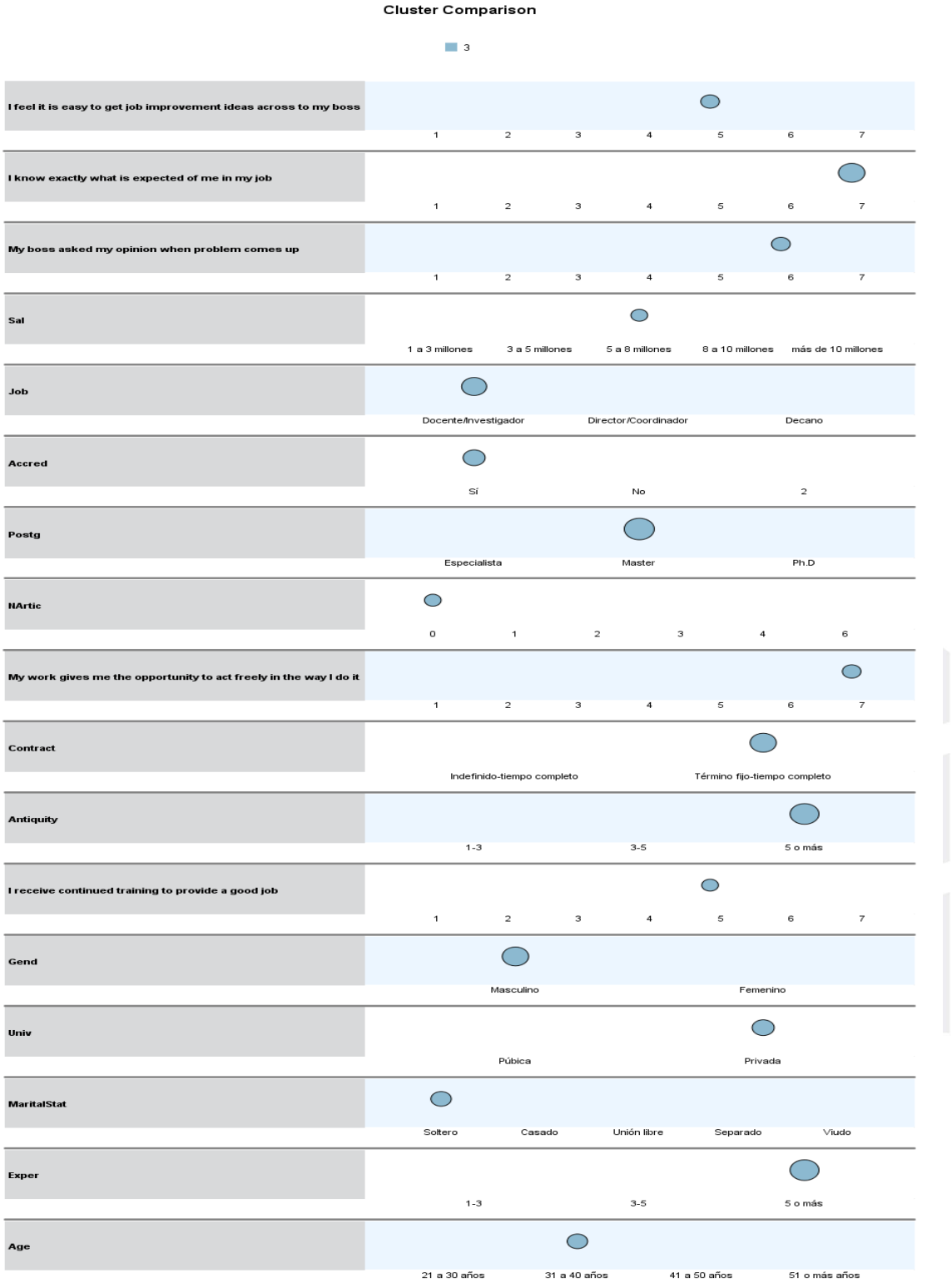

Figure F25. Cluster 3 comparison. Moderating effect of the opportunity cost in the relation Intrinsic rewards → Employees´ Mobility intentions.