#4 EFFECT OF NATIONAL CULTURE AND IT OCCUPATIONAL CULTURE ON JOB SATISFACTION AND PROFESSIONAL SELF-EFFICACY IN PERU

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ABSTRACT

This study is an initial research related with the national culture, Information Technology Occupational Culture (ITOC), and Professional Self-Efficacy and Job Satisfaction. The impact of these cultural components in the performance of the organizations have not been properly analyzed, especially the last one. Initially we have taken only two constructs of the ITOC: Structure and Autonomy, and two constructs of National Culture: Uncertain Avoidance and Power Distance.
A questionnaire was applied to IT managers of 17 enterprises of diverse economic sectors in Peru. This study is an element of a large study that is realize in 38 countries, the World IT Project.
After this specific research, other papers could be realized next in order to define the role of ITOC with more precision. The relation between the items of ITOC and the items of National Culture were validated. Additionally the relation between Power Distance and Job Satisfaction, Professional Self-Efficacy and Job Satisfaction and IT Technology Issues and Professional Self-Efficacy were also validated.

Keywords: National Culture, IT Occupational Culture, Culture in Peru, Job Satisfaction and Professional Self-efficacy

INTRODUCTION

One of the first category of culture that was studied was national culture, that is defined as the shared values and assumptions held by individuals within the nations. American researchers found close relations between culture and the personalities of the persons that live in that country (Hofstede, Hofstede and Minkow, 2010). Other category that was studied carefully was Occupational culture, and could be defined as a distinctive structure of thought and actions joined by members of the same career and showed in their language, traditions, outlooks, beliefs, and attitudes. Occupational culture can influence, jointly with organizational culture, national culture and the profession, the behavior of its members (Hofstede et al., 2010). From the diverse range of professions, Information Technology (IT) is a very important one, and has its own occupational culture, that is different from other professions (Nord, Nord, Cormak and Cater-Steel, 2007). IT occupational culture is important to be analyzed because of the relevant role that IT plays actually, and because the interactions between the IT profession and other profession (business, administration and others) at any organization. This research is an exploratory analysis, part of a wider study, that is realized at international level, with information from 38 countries (Palvia, Jacks, Licker, Serenko, Ghosh, Romm-Livermore and Turan, 2017, in Press).

LITERATURE REVIEW

IT Occupational culture (ITOC)

By the same way, the IT profession has its own particular culture. IT organizational culture is different from other professions, and from organizational culture in general (Nord et al., 2007). Occupational culture is relevant because of several reasons: culture has a causal effect on behavior of the IS executives, at different levels. IT occupational culture define shared symbols and anticipated behaviors for members of the profession, and cultural conflict can originate when several groups interact and do not have the same values (Leidner and Kayworth, 2006; Nord et al., 2007). Hence, when an IT occupational group interacts with a business manager's occupational group, it is possible to develop a

conflict (Nord et al., 2007). Besides that, the culture of IT departments could affect the business outcomes of the organization (Leidner and Kayworth, 2006; Iivari and Huisman, 2007).

Hofstede Cultural Dimensions

Researcher Geert Hofstede published in 1980, his well-known book Culture´s Consequences, that is highly influential and became a testimonial about culture dimensions. The author and his book, are one of the authors and books more cited in social sciences (more than 3,000 times) (Orr and Hauser, 2008). Hofstede has the more appropriate model for conceptualizing and operationalizing culture, and is the most widely used framework for national culture in different areas of social sciences (Soares, Farhangmehr and Shoham, 2007).

Power distance

This dimension is defined as "the extent to which the less powerful members of organizations and institutions (like the family) accept and expect that power is distributed unequal" (Hofstede et al., 2010). A high degree of the index indicates that hierarchy is clearly established and executed without mistrust or rational motive (Yoo, Donthu & Lenartowicz, 2011).

Uncertainty avoidance

This dimension is "the extent to which the members of a culture feel threatened by uncertain or unknown situations" (Hoftede et al., 2010). This dimension deals with the need for well-defined rules for settled behavior (Soares et al., 2007).

IT Occupational Cultural Dimensions

Jacks and Palvia (2014) made a research in order to define specific dimension for IT occupational culture. The methodology was an exploratory empirical examination with quantitative and qualitative elements to measure the dimensions of IT occupational culture. The goal was to identify those dimensions with have a specific connection with to the IT occupation contrarily to organizational relevance dimensions that could be applied to any other kind of organization.

Structure of power

This dimension is specified as the rank to which members of the IT occupation believe that power should be distributed versus be in a central position. Because information and technology represent power inside the organization, the relevance of structures of power and its distribution is very important to IT (Jack and Palvia, 2014).

Few year later, Jacks, Palvia, Iyer, Sarala and Daynes (2017) in a study of an ideology of IT Occupational Culture found initially that there were six factors: autonomy in Decision Making, Structure in the Environment, Precision in Communications, Innovations in Technology, Reverence for Technical Knowledge and Enjoyment in Workplace. After applying a qualitative and quantitative methodology, they found that they were only five factors, and have to unify the Structure in the Environment and Precision in Communications.

These factors or constructs were defined in this way:

Autonomy in Decision Making
"Level to which members of an occupation believe that they should be empowered with decision-making for the organization, access of tools, and access to the data," (Jacks et al., 2017).

Structure in the Environment

"Level to which members of an occupation believe that orderliness, process, and role definition are need in the work environment," (Jacks et al., 2017).

Self-Efficacy

Perceived self-efficacy could be explained as people´s beliefs regarded their abilities to achieve appointed levels of actions that permit to influence over events that affect their lives. Self-efficacy beliefs act through cognitive, motivational, affective and selection processes. A poweful sense of efficacy increases human achievement and personal well-being in several ways. People established challenging goals and hold stong commitment to them (Bandura, 1994). Self-efficacy is constructed on self-mastery experience, indicating that personal attainment can impart perceptions of self-efficacy. It is specifically related to a particular situation, but could be generalized to overall personal competence (Hsieh, Hsieh and Huang, 2016; Bandura, 1997).

Job Satisfaction

Job Satisfaction is a general attitude with respect to one´s job; it is the difference between the gains workers will receive and the gains they believe should receive. It could be defined too, as an enjoyable emotional state resulting from the assestment of one´s job or job experience (Shah, 2015). It could be defined as the attitudes of workers in relation to outcomes on the job. It has been connected to positive employee results as lower stress levels and large empowerment, and increased organizational performance because of intensified employee productivity (Sledge, Miles and Coppage, 2008). It

The Model and Hypotheses

The model uses two constructs from ITOC: Structure and Autonomy, two from National Culture: Uncertain Avoidance and Power Distance, and other constructs: Job Satisfaction, Professional Self-Efficacy, IT Technology Issues, Personality and Demographics. The research model and the hypotheses are in Figure No 1.
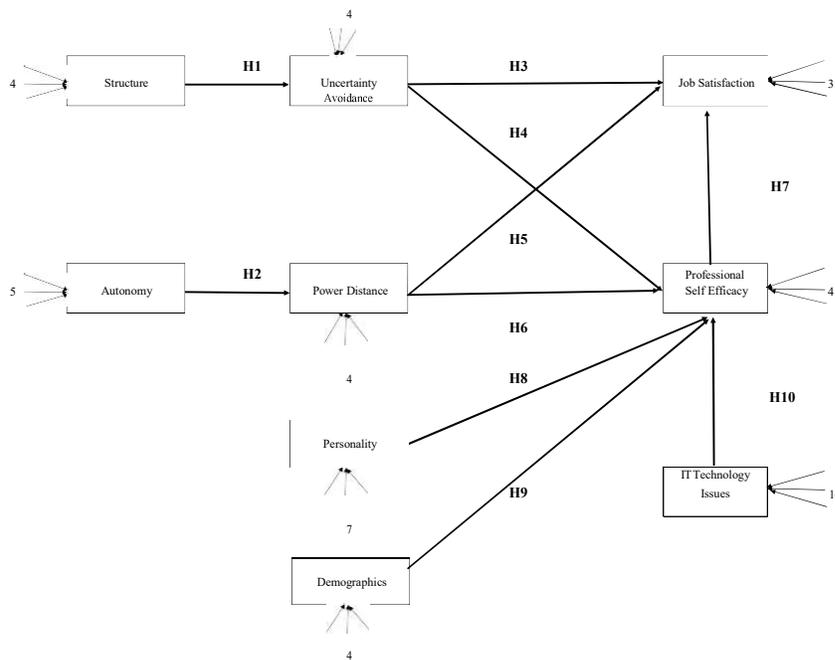

 Figure No 1. Research Model and hypotheses

METHODOLOGY

This is a quantitative model, the knowledge theory is objetivism, with a theoretical perspective of post-positivism, the methodology is through surveys, utilizing the questionnaire to get the information. Research through surveys is a crossectional study, with questionnaries, and statistical tools that permit to generalize the information from the sample to the population.

Data collection

The data were obtained from January 2016 to October 2016, with a questionnaire of 156 questions that last between 30 and 40 minutes. The respondent were IT professionals from different roles, from programing, analysis and design, maintenance, operations, through project management and application support.

Population sample

A sample of 159 questionnaires were used from executives from 17 differents organizations of divers sector of the peruvian economy. Initially, through the CIO (Chief Information Officer), several important companies were invited to participate in this study. The companies were from the banking sector, retail, mining industry, education (univeristies), government, insurance, beauty products, telecommunications, ant other economical sectors. From these questionnaires, 80,5% were men, 46,5% have a bachellor degree, 38,4% have between 10-19 years of IT experience, 27% were from organization between 20-29 years old, 22% were from companies with 11-25 IT employees, 22% from government institutions and 15% from the financial institutions.

Data Analysis

The analysis of the data is made with the SPSS statistical package, using several statistical tools, like descriptiv statistics, correlations, and exploratory factor analysis. After that, Smart PLS was used to analyze the relations between the constructs. Almost all variables have been measured with a 5-point Likert scale.

RESULTS

The results could be observed in Figure No 2, with the significant relations between constructs, and the variance explained for each one of the dependent constructs.
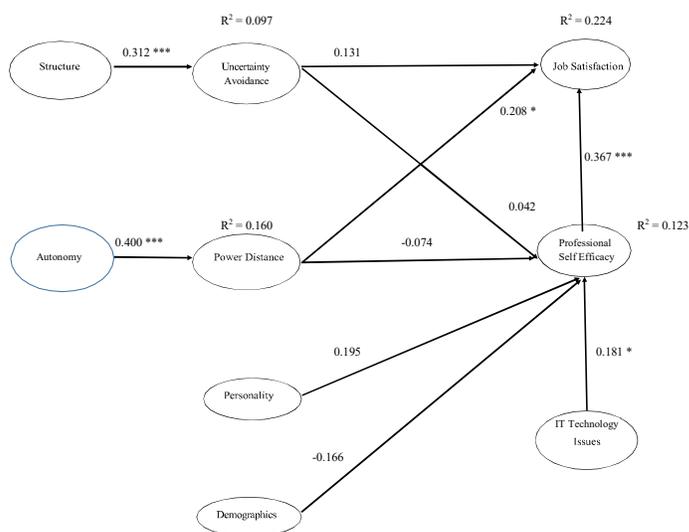

Figure 2. PLS Model Results

And in this way, if possible to check the hypotheses that were tested and confirmed, in Table No 1.

TABLE 1
Hypothesis Validation

Hypothesis	Outcome
H1: Structure is directly related to Uncertain Avoidance	Validated
H2: Autonomy is directly related to Power Distance	Validated
H5: Power Distance is directly related to Job Satisfaction	Validated
H7: Professional Self-Efficacy is directly related to Job Satisfaction	Validated
H10: IT Technology Issues is directly related to Professional Self-Efficacy Validated	

DISCUSSION

We found a very significant relation between Structure (dimension of ITOC) and Uncertain Avoidance (dimension of National Culture), and also, a very significant relation between Autonomy (dimension of ITOC) and Power Distance (dimension of National Culture). As mentioned by several authors, there is a direct relation between occupational culture and national culture that help explain the differences when using a new technology by different groups (Chisalita, Puerta, Hoorn, Veer and Kok, 2005; Warren and Lee, 2002).

There was not a significant relation between Uncertain Avoidance (dimension of National Culture) and Job Satisfaction, but found a significant relation between Power Distance (dimension of National Culture) and Job Satisfaction. Other authors found some direct or indirect relation between National Culture and Job Satisfaction (Huang & Van de Vliert, 2004; Lindholm, 1999-2000). Perhaps some of the factors that did not help to find a significant relation between Uncertain Avoidance and Job Satisfaction were the size of the sample, that could be a little bigger, the fact that the analysis could be a little better considering a sample of several countries, and the fact that in the future the constructs of Job Satisfaction and Professional Self-efficacy could be defined with more detail (items).

We did not find a relation between Uncertain Avoidance or Power Distance (dimensions of ITOC) and Professional Self-efficacy, relations that were not previously studied. We did not either find any relation between Demographics and Professional Self-efficacy. We either find any relation between Personality traits and Professional Self-efficacy, but because of the p value found (p= 0.71) it would be possible to find a significant relation between both construct using a more precise definition of Professional Self-efficacy and bigger sample size.

Professional Self-efficacy seems to be a construct that has a relation with other constructs or variables related with the past experience (Mulki, Lassk & Jaramillo, 2008; Chowdhury, 1993). We found a significant relation between Professional Self-efficacy and Job Satisfaction, that is accordingly to previous studies that found a direct or indirect relation between both constructs (Hsieh et al., 2016; Caprara, Barbanarelli, Borgogni, Pettita & Rubinacci, 2003; Kim, Rhee, Ha, Yang & Lee, 2016; Peng & Mao, 2015; Jacks & Palvia, 2014).

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