

Managers' Readiness for Organizational Change: Exploring the Intercultural Competence Connection

Victoria E. Erosa

International Graduate Center (IGC)
University of Applied Sciences (Hochschule) Bremen
Süderstraße 2, D-28199
Bremen, Germany

José L. Vallejo García

École de Management (HuManiS)
Université de Strasbourg
61 avenue de la Forêt-Noire
F-67085 Strasbourg Cedex
Strasbourg, France

Abstract

In Global business environments influenced by technology dynamic life cycles, structural organizational changes are frequently required to take advantage from new business opportunities, being top level managers' readiness for change a core issue for organizations. This paper presents results of a research project conducted to gain understanding in regard of which of the Intercultural Competences structural components influence manager's readiness for organizational change. Using a unique and innovative analysis lens resulting from combining Organizational Readiness construct from the Organizational Behavior (OB) arena with the Professional Competences approach from the Education Sciences field, and data collected from 557 worldwide respondents. Results of quantitative analysis identify eight of the twelve Intercultural Competence components related to Managers' Readiness for Change, revealing that behavioral-social skills are remarkably relevant as influencing factors in terms of organizational readiness. Findings are considered to be valuable information for HRM policy definitions as well as for managers' training and education programs development.

Keywords: Intercultural Competences, Readiness for Change, Organizational Change, Technology Change

1. Introduction

During the last three decades, Technology Development dynamic growth, as well as the viral diffusion of technology use in business as a means to support productivity growth, competitiveness and new business ventures, created new rules for business such as Global Markets attendance, Supply Chain integration as business practice, and new technology based type of business in the form of E-Commerce and E-Business among other types of E-relations as in E-Government (Bailey & Cotlar, 1993). The impact of technology change due to the Information Technology re-evolution is widely documented by the scientific and popular literature. This technology turmoil and its effects in the business world soon became -for top level managers and civil servants- a major challenge to face as Technology Adoption leads to structural organizational changes in order to be able to cope with e-based operational processes, work with interconnected technology infrastructure, fulfill obligations with Government Agencies such as the fiscal ones (Erosa, 2013), and to develop different -new- professional competences in the Human Resources platform. The relation between business and technology configure a complex environment in which organizations require to change themselves rapidly to survive and/or to grow. In consequence, intercultural competence has become a necessary piece on the path of top management career development as a means to deal successfully with multi-cultural business environment.

This changing business scenario soon took the focus of attention of practitioners and researchers into the field of Organizational Change studies, in which the readiness issue became a priority when implementing change derived from the impact of three structural conditions that promote organizational change: technology, organizational size and strategic business choice (Burgelman, & Maidique, 1983). Technology Readiness stands for the propensity of individuals and organizations to adopt and embrace cutting-edge technology for accomplishing goals (Parasuraman, 2000), considering their infrastructure availability, positive attitude towards technology and the skills and knowledge required to operate the technology. From the Diffusion Theory view, Leonard-Barton (1982) points that the process of adoption that brings technology change involves the dissemination of know-how and technical information as well as further adoption by end users which are not the decision making person, this view grounds organizational change implementation at the individual level. Organizational Readiness refers to the organization's capabilities to manage change (Madsen, 2005; Weiner, 2009) while Human Resources (HR) Readiness refers to employees attitude by the means of proactive behavior to adapt to changing conditions supporting organizational change, because proactivity enhances confidence to behave in new ways as required when facing changing circumstances (Herscovitch & Meyer, 2002; Hornung & Rousseau, 2007). Although each area is focused in different subject, the common construct of readiness is considered by all of them as a multidimensional construct applied in readiness assessment research studies (Erosa & Arroyo, 2003; Rafferty, 2013).

While the business world was trying to understand the proper ways to take advantage and profit from the Technological re-evolution and from global business operations, a parallel change of the same magnitude was fermenting in the Education field by means of the European Countries agreement (European Commission: Tuning Project, 2002 :22) to use as a figure of a persons' education the notion of what a person can do with its knowledge and skills, known in the Education Science field as the concept of *Professional Competence*. This concept is identified as a major change derived from the implementation of the Bologna Standards (Agten, 2007) as reveals the following statement...Competences and learning outcomes are the basic parameters in order to be able to compare higher education between different universities and different countries. They are as reference of transparency, benchmarks for quality assurance and accreditation, and for employability as a tool for better communication with the stakeholders of the field... (Keeling, 2006).

The Competence concept reached business' world landing in the Human Resources (HR) arena as a key tool to support the stages of the HR managerial process, producing a major change in the job position's description for which the employees profile is aligned to competences instead of the abilities description using a traditional list of knowledge developed by formation, training or work experience (Mansfield, 1996). The concept expanded to Latin America (Erosa, et al, 2008) to pave the road to work on competences development for undergraduate studies in Management, Engineering, Social and Health fields. In this context Education by Competences reached the Management of Technology (MOT) arena, -by means of a module integrated to several MBA Programs delivered in various countries with worldwide participant students-, focusing the interest in development of the competences platform required to cope with challenges related to Technology Planning and Technology Change Management and implementation. In this context, research was conducted to identify the MOT competences required by middle and top managers for performance assessment and promotion, resulting a dominant requirement of technology change management, technology planning and technology suppliers selection competences (Erosa & Arroyo, 2009).

Upon this scenario of Technology Change in Global business environment, arise the notion of the two venues' - Organizational Readiness for Change and Intercultural Competences- meeting point at the individual level (the Top Level Manager) being extended to work group level (Board/Steering Committee), where interpersonal competences related to attitudes and behavior are a key issue to follow and conclude decision making processes. Within attitudinal competences such as creativity, leadership, empathy and risk taking are the Intercultural Management Competences considered as foundations for doing business in a Global context with country's and organizational culture diversity, as well as to operate complex organizations and business units with multicultural employees and multicultural disciplines of knowledge participation and/or intervention. At this point, top level managers' readiness for change is a core issue for the firms. From this reasoning, emerges the research purpose to explore which of the Intercultural Competences structural components determine manager's readiness for organizational change. Upon this basis, the research question is posed.

R. Q. Which are the Intercultural Competences structural components that determine manager’s readiness for organizational change?

2. Conceptual Framework

Being the Unit of Analysis at individual (Manager) level, this research does not intent to cover all the organizational change variables, neither all managerial professional competences. The purpose is to look for deeper understanding of the array of components of a single managerial interpersonal competence, -the intercultural management competence-, that supports manager’s readiness for Organizational Change. To do so, is used as analytical tool a theoretical framework based on Organizational Behavior Theory which hosts the constructs of Organizational Change and Change Readiness, and Education Theory in which is grounded the Professional Competences construct. The implications of the results of such a research endeavor are related to HR policies regarding top management competences profile as well as with job positions design (Hoff, 2008). New areas of opportunity to develop are unveiled regarding Managerial Education and Training, given the extended coverture of Global business transactions and Technology change. In this wide and complex context, to determine the study boundaries, the research question is operationalized through the Conceptual Framework presented in Diagram 1.

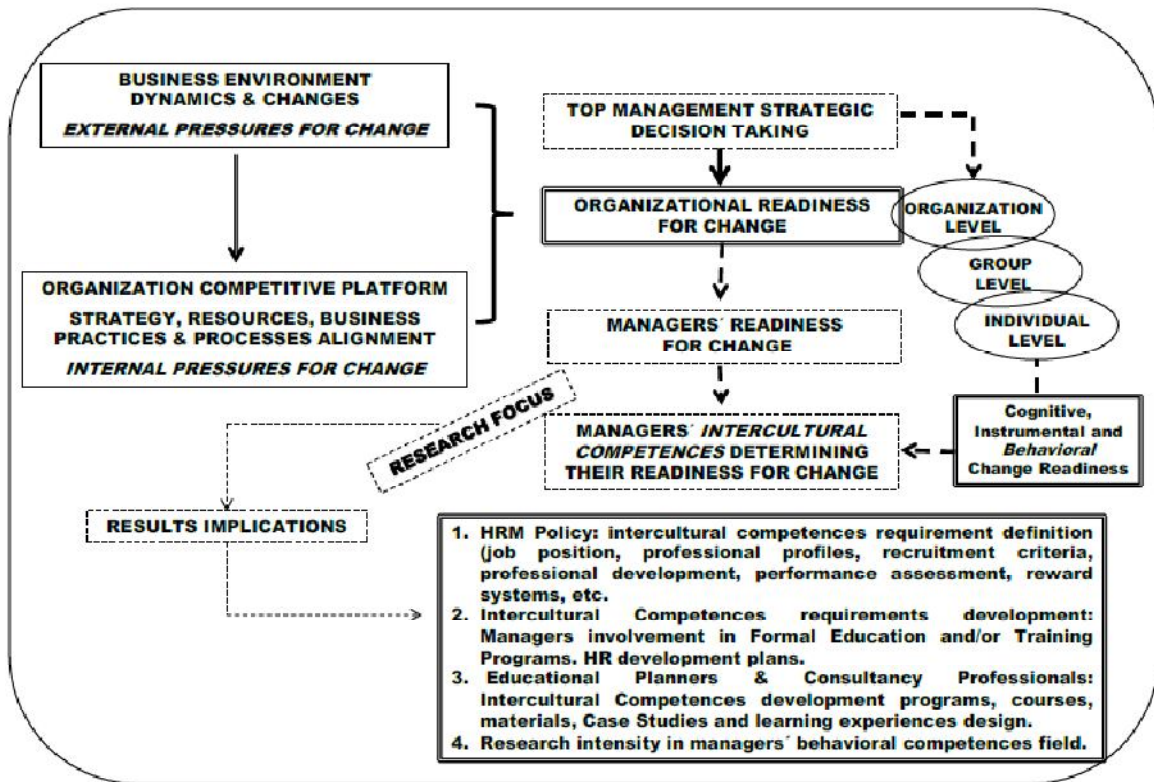


Diagram 1: Conceptual Framework of the Research Study focused on Managers’ Intercultural Competences Readiness connection with Organizational Change Readiness

3. Theoretical Framework

3.1 Organizational Behavior (OB)

The research purpose in this paper is set on the Organizational Behavior (OB) arena, as it is the interdisciplinary field of Managerial Sciences dedicated to the better understanding and managing people at work (Robbins & Judge, 2009 :5). OB model has three levels of analysis: organizational, group and individual, it is a horizontal discipline that cuts across virtually every job category, business function and professional specialty. The contingency approach of OB encourages managers to view organizational behavior within a situational context, meaning that organizations react to some contingency factors producing uncertainty and instability in the business environment (Kreitner & Kiniki, 1998:625). This view matches with organizational challenges to be faced -by managers- such as technology changes and/or operation in global business environments.

OB is the theoretical realm of organizational change management and individual attitudes, abilities and emotions, providing the analytical tools and supporting constructs to look for better understanding of problems related with organizational change readiness and managers competences to face organizational changes.

3.2 Organizational Readiness for Change

Organizations themselves go through dynamic patterns of development over time, and in doing so they experience changes in their nature as business environment matures or change radically making clear that is a context in which nothing stands still. This means that organizations have to involve constantly in Organizational Change processes. The degree of complexity, cost and uncertainty of the change goes in a range from adaptation to business practices that are familiar to the organization, followed by innovative changes that introduce new practices, up to radically innovative changes in which new industry practices are introduced to the organization (Lewin, 1951). Framed in the OB field, Organizational change has three dimensions: Organizational, Work Group and Individual, being commonly accepted that all individuals consider change readiness the same way along the same set of dimensions (Kozlowski & Klein, 2000). Working at Individual level, Top management's role in implementing change according Lewin model is discussed by Shein (1992), while readiness for change is discussed by Trahan and Burke (1996), and subject of assessment by researchers of various fields (Amatayakul, 2005; Rafferty, Jimmieson & Armenakis, 2013).

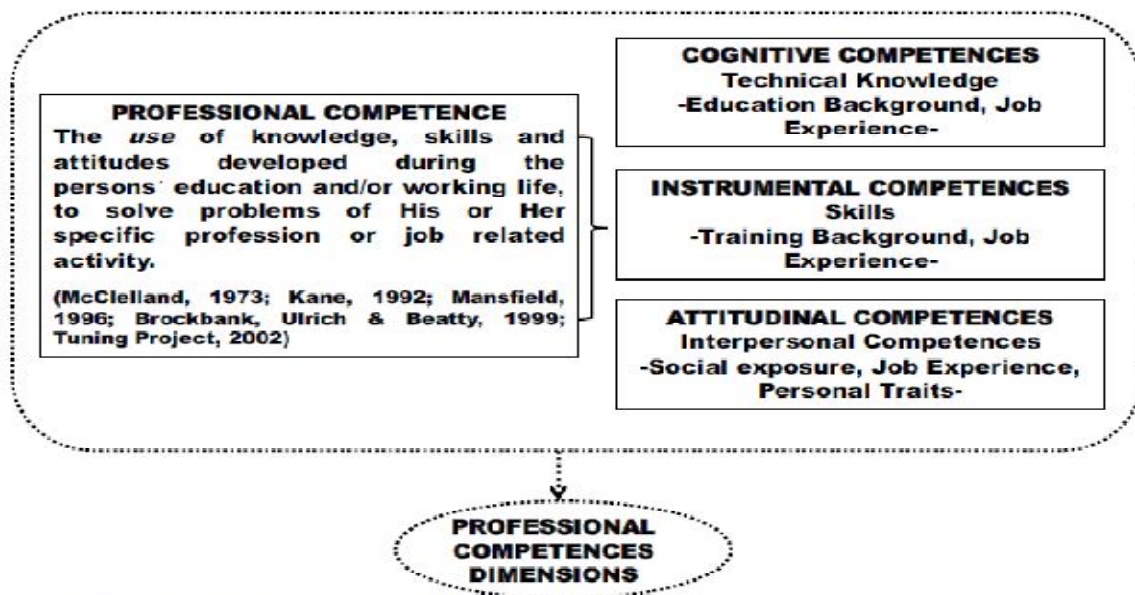
Opposite to resistance to change -as an emotional behavioral response to real or imagined work changes- is the Organizational Readiness for Change construct. Following Weiner (2009) ideas in this regard, in this paper is considered that the construct's meaning, measurement and relationships with other variables differ across levels of analysis. Being the Organization Readiness for Change its capacity of manage change as a whole (organization level) it is reasonable to consider that managers (individual/group level) readiness or capacities for manage change are a key component of the total Organizational Readiness. At individual level, capacities for change management represent a set of Managers Professional Competences related to knowledge, skills and attitudes, among managerial competences, in the interpersonal competences category are the intercultural competences, whose importance arouse from the organizations' global business and interdisciplinary operating context. Definitions from Table 1, supports the notion that organizational change is any significant action or cluster of actions which leads to a movement of path, -or progression- that has an effect on a way that an organization and its managers work. The Organizational Change Readiness (OCR) construct refers to attitude and behavior while Organizational Change is focused in organization structure and capabilities besides the attitudinal perspective...reconfiguration of the components of an organization to increase efficiency and effectiveness (Francesco & Gold, 1998)..., and to the extent to which an organization is receptive or ready to change by having the capacity to absorb new knowledge, strong leadership, visionary staff in key positions, and enjoy a climate conducting to experimentation and risk taking.

Table 1: The Organizational Change Construct

AUTHOR	DEFINITION
Barabel and Meier (2010)	Organizational change is an ambivalent concept that symbolizes whether the progress (improvement/ innovation) or the risk of a loss in terms of resources and power.
Beckhard (1969)	An effort planned, organization-wide, and managed from the top, to increase organization effectiveness and health through planned interventions in the organization's processes, using behavioral-science knowledge.
Burnes (1996)	The understanding of alterations within organizations relating individuals, groups, and at the collective level across the whole organization.
Francesco and Gold (1998)	Is the reconfiguration of the components of an organization to increase efficiency and effectiveness
Grouard and Meston (1998)	The process of radical or marginal transformation of the structures and competences set up in the process of the development of the organizations.
Hafsi and Fabi (1997)	Is a process of radical or marginal transformation of the structures and competences that punctuate the evolution processes of organizations.

3.3 Professional Competences

Literature on change and change readiness supports the notion that managers require abilities to cope with unexpected situations and be able to direct people, work and operations towards the necessary adjustments facing change. The adaptation to new situations in any working environment definitely implies competences that have to do with interpersonal relations rather than with only technical or structural aspects. Therefore the idea of exploring such necessary interpersonal competences appears to be relevant for the notion of change readiness and the associated skills of managers. Upon this view, this research study addresses the two connecting points (intercultural competence and readiness for change) from the Professional Competence approach which refers to the use of knowledge skills and attitudes developed during the persons’ education life, to solve problems of His or Her specific profession or job related activity (McClelland, 1973; Kane, 1992; Mansfield, 1996; Brockbank, Ulrich & Beatty, 1999). The notion was extended (Boyatzis, Stubbs & Taylor, 2002) by considering that a competence is ‘an underlying characteristics of an individual, which is causally related to effective or superior performance in a job’ such as ‘a motive, trait, skill, aspect of one’s self-image or social role, or a body of knowledge which he or she uses’. Within the field of psychology the term cognitive refers to the “internal mental states and processes of an individual” (McKenna, 2006:5) being widely used to explain the mechanisms related to knowledge or the storage of information that is used by an individual to acquire knowledge. The cognitive level presupposes learning through a conscious reflection process, therefore can be planned, evaluated and therefore developed. From this perspective, Competences represent a dynamic combination of attributes with respect to the application of knowledge, attitudes and responsibilities. Therefore, an individual has Professional Competences if has the knowledge, skills and attitudes required to perform a particular job, is self-sufficient to solve the problems related to His/her job position and has the ability to function successfully in the workplace (Diagram 2).



From: Erosa, V., Ramirez, P., Ortiz, J. (2008)

Diagram 2: Professional Competences Dimensions

The construct assumes that knowledge is just one of the several dimensions of a professional competence, besides attitude configurations, motives and skills learned. Brockbank et al (1999) consider that a competence is “what the individual is and what an individual knows and do”. These definitions of a professional competence challenge the traditional perspective of knowledge as the main source of problem solving capabilities. During the early 2000s, the European Union’s Tuning Project defined the competence concept in three types: 1) instrumental competences referred to analysis, planning, written and verbal communication skills, problem solving and decision making; 2) interpersonal competences referred to teamwork, intercultural relations and ethical behavior, and 3) systemic competences related to self-learning, creativity, context adaptation, initiative and environmental sensitivity. In a broader sense the mirror project of the Tuning between the European Union and Latin America (UEALC 6x4 Project) defines professional competences as the real capabilities of a person to perform his/her profession with efficacy and efficiency, clearly referring to the practical application of knowledge in the professional arena (Erosa, 2007).

In the context of this paper, the Professional Competence as the persons' capability -in terms of knowledge, skills and attitudes- to perform His/her profession with efficacy and efficiency is taken to the Organization as the performance scenario, and to the Management function as the operational activity. Being considered the Organization as a dynamic entity with responsive behavior towards the changing business environment, the link with Organizational Culture (OC) appears as a key framework. Literature in the matter suggests that research on this topic can be traced back to the first middle of last Century, receiving serious attention in the 1980s due to works (Ouchi, 1981; Peters & Waterman, 1982) linking organizational performance and outcomes with culture. The notion of competence grounded in the behavioral dimension reached the Organizational Behavior field (Cooley and Roach, 1984), being quickly framed into the concept Organizational Culture (Hofstede, 1994), and later into the concept of Culture in the anthropological sense. The notion of intercultural competence is also relatively new, is framed by the concept of culture, and any interpretation or attempt to define it might result in discrepancy because of its very nature. Many definitions of intercultural competence though have been offered in recent years by numerous authors (Table 2.) that have contributed to the field with vast material to provide a sound understanding of the topic. Intercultural Competence definition has received a variety of connotations –all in the realm of the skills competences dimension- in the related literature ranging from a communication tool (Cui & Van den Berg, 1991), a person behavior (Cooley and Roach, 1984; Knapp, 1995), a capability (Gertsen, 1992), an aptitude (Barmeyer, 2004), and as an ability (Hofstede, 1994; Dearnorff, 2006). For the purpose of this research focus, Hofstede' (1994) definition of Intercultural Competence as ...to be able to manage other cultural environment, to be able to solve problems...is adopted as analytical tool because the concept refers to the condition that an individual holds as a capacity to successfully interact with people from different cultures.

Table 2: The Intercultural Competence Construct

AUTHOR	DEFINITION
Hofstede, G. (1994)	Intercultural competence "constitutes a third level of learning and is the result of the awareness of the fact that we have received a certain mental programming and that others (...) have a different mental program, of the acquisition of knowledge on the other culture and of the practice. Competence is to be <u>able to manage in this new environment, to be able to solve problems.</u> "
Cui and Van den Berg. (1991)	Perceive intercultural efficacy as a "three-dimensional concept which includes communication competence, cultural empathy and communicative behavior." They emphasize cultural empathy as a factor including tolerance, empathy for the other's culture, empathy towards dissimilar ways of working and the awareness of cultural differences.
Bittner and Reisch . (1994)	Intercultural competence occurs, according to Bittner and Reisch (1994), when the "employee is capable of properly managing the intercultural aspects of his work, along with the preferment of profiting also from the intercultural synergies. "
Knapp . (1995)	the "adaptation of a perceived behavior with the pre-existent expectations within a specific context, and the efficacy of such behavior to reach the pursued objectives."
Dearnorff (2006)	"intercultural competence is the ability to interact effectively and appropriately in intercultural situations, based on specific attitudes, intercultural knowledge, skills and reflection."
Cooley and Roach (1984)	a "communicative behavior that is the reflection of an individual's competence, culturally specific and, bound by the culture in which they are acted out."
Gertsen (1992)	"the capability to work with efficacy within another culture"
Barmeyer (2004)	is "a compilation of analytical and strategic aptitudes that widen the range of interpretations and actions of an individual within his/her interpersonal interaction with members of other cultures."

3.4 The Intercultural Competence Components

Since the last decade, Intercultural Competences has been analyzed resulting in various models proposing several structural components of the construct (Beamer, 1992; Byram, 1997; Ting-Toomey, 1999; Stier, 2002; Weiss, 2002; Dearnorff, 2006; Hoff, 2008; Spitzberg and Changnon, 2009, among others). The models are not mutually exclusive and provide a rich framework to support the selection of common elements useful for the purpose of this analysis.

The constructs' multilevel composition received attention from Beamer (1992) who describes five levels of intercultural competence being the first related to "acknowledging diversity", the second implies "organizing the information according to the stereotypes", the third level is about "posing questions to challenge those stereotypes", the fourth level requires "analyzing communication episodes" and the fifth level suggests "generating 'other culture' messages."

A decade after, Stier (2002) divide the concept into four parts: content competencies, processual competences, intrapersonal competences and interpersonal competences, setting the levels in the cognitive and attitudinal competences arena. Upon this view is reasonable to consider that an Intercultural Competence is identified as an interpersonal competence. Medina-Walker et al. (2003) considered later that the construct has four major components: open attitude (challenging assumptions, quick judgment avoidance, ambiguity tolerance), self-awareness (knowing one's own cultural values, beliefs, attitudes, behaviors and assumptions), other-awareness (knowledge about the other, cultural disconnects, values, perceptions and behavior of the counterparts), and cultural knowledge (knowledge about the others' culture in terms of history). In Table 3. are presented the main common components referred to in the Intercultural Competence Models considered for the empirical work of this research study, as well as the questionnaire items based on them.

Table 3: Intercultural Competence Construct Composition

DIMENSION/COMPONENT	RATIONALE	MEASURE (ITEM)
COGNITIVE		
1. Knowledge Discovery Byram, (1997) in Spencer-Oatey and Franklin (2009)	1. Cognitive orientation of the manager in a genuine interest of learning and understanding cultural differences.	40 to 43
2. Respect for Others Byram, (1997) in Spencer-Oatey and Franklin (2009)	2. Display of respect towards individuals from different cultural background.	44 to 47
3. Contextual Understanding Griffith and Harvey, (2000) Ting-Toomey, (1999)	3. Intercultural sensitivity shown by the manager in relation with certain willingness to comprehend and value the complexity of cultural understanding.	48 to 51
4. Cultural Mindfulness Gudykunst, (2004) Medina-Walker <i>et al.</i> , (2003) Ting-Toomey and Kirogui, (1998)	4. <i>Cultural intelligence</i> held by a manager based on rational and objective assumptions about dissimilar others.	52 to 55
EMOTIONAL		
5. Tolerance for Ambiguity Byram, (1997) in Spencer-Oatey and Franklin, (2009)	5. The manager's natural acceptance of uncertainty derived from intercultural encounters and capacity to handle the associated stress	56 to 59
6. Cultural Empathy Byram, (1997) in Spencer-Oatey and Franklin (2009)	6. Emotional understanding and the ability to perceive others' feelings and be able to feel emotionally involved and show honest concern about a given situation	60 to 63
7. Polycentrism Kühlmann and Stahl, (1998), translated by Franklin in Spencer-Oatey and Franklin, (2009) : 217-218	7. Referred to as openness and the ability to be nonjudgmental with people from other cultures even if it might imply certain discomfort or anxiety.	64 to 67
8. Emotional Strength Larsen and Buss, (2008)	8. The capacity to regulate emotions derived from uneasy situations and be able to recognize and overcome critical incidents involving others' susceptibilities.	68 to 71
SOCIAL		
9. Behavioral Flexibility Byram, (1997) in Spencer-Oatey and Franklin (2009)	9. Capacity of the manager to adapt behavior and adjust conduct according to the situation and eventual level of tension in an interrelation	72 to 75
10. Communicative Awareness Byram, (1997) in Spencer-Oatey and Franklin (2009)	10. The skill of context-acquiring sensitivity, including foreign language notions and the ability to recognize different communication standards, styles, as well as being able to pick up meaning resulting from vague messages or verbal statements.	76 to 79
11. Collaborative Dialogue Kühlmann and Stahl, (1998) In Spencer-Oatey and Franklin, (2009)	11. In reference to the so called meta-communicative competency (Kühlmann and Stahl, 1998) and the ability to contribute and pursue positive outcome from a conversation, also in the sense of helping the communication process by reinforcing crucial statements and seeking correct interpretation from both sides.	80 to 83
12. Social Rapport Kühlmann and Stahl, (1998) Stahl, G. (2002) in Spencer-Oatey and Franklin, (2009) Duong Quynh L. (2005).	12. Is also indicated by the networking skills of the manager to build friendly relationships in accordance to people's different sensitivities and bearing in mind the cultural background of the counterpart at all times.	84 to 87

3.5 Intercultural Competence Assessment Framework

Moving the construct to the empirical work field, the notion of Intercultural Competence Assessment is introduced to the analysis. In this regard, one of the most widespread framework studies recently developed is the Intercultural Competence Assessment (INCA) Project, sponsored and funded by the Leonardo Program of the European Commission's Lifelong Learning Curricula in the United Kingdom. It is a set of assessment tools designed to measure intercultural competencies and abilities, the instrument was originally tried and implemented for engineers since there was a need for proficient managers regarding intercultural issues and it finds its theoretical background mainly in the works of Kuhlmann and Stahl (1998) and Byram (1997) as well as other authors in the area of languages, intercultural communication and cultural awareness.

The INCA assessment tool itself aims to, and actually measures, predominantly six basic intercultural competences which are: tolerance for ambiguity; behavioral flexibility; communicative awareness; knowledge discovery; respect for otherness; and empathy; all of which have been integrally included as core independent variables of this study. In addition to the six nucleus competencies, the INCA Project also provides good partial basis for the definition of another variable used in this study which is openness. Though the INCA tool regards to this dimension as including respect for otherness and tolerance for ambiguity, the researcher gives it a different treatment based on alternative definitions offered by Kuhlmann and Stahl (1998). Thus openness becomes another core independent variable for the purposes of this work but it is referred to in the research model as polycentrism, meaning free of prejudice.

Table 4: INCA Project. Intercultural Competence Assessment Components

Component	Rationale
1. Tolerance for ambiguity	Ability to accept ambiguity and lack of clarity and to be able to deal with this constructively.
2. Behavioral flexibility	Ability to adapt one's own behavior to different requirements and situations.
3. Communicative Awareness	Is the ability to recognize different linguistic conventions, different foreign language skills and their effects on discourse processes, and to negotiate rules appropriate for intercultural communication.
4. Knowledge discovery	Ability to acquire new knowledge of a culture and cultural practices and the ability to act using that knowledge, attitudes and skills under the constraints of real-time communication and interaction.
5. Respect for Otherness	Is manifested in curiosity and openness, readiness to suspend belief about (the 'naturalness' of) one's own culture and to believe in (the 'naturalness' of) other cultures.
6. Empathy	Ability to project oneself into another person's perspective and their opinions, motives, ways of thinking and feelings. Empathic persons are able to relate and respond in appropriate ways to the feelings, preferences and ways of thinking of others.
7. Openness/Polycentrism	Attitude to be open to the other and to situations in which something is done differently.

4. Methodology

4.1 Research Approach

The complex Theoretical Framework built to identify the components of the Intercultural Competence construct that could be connected to the organization's readiness for change, is described in Diagram 3. From the research purpose, two main data sets are key to collect: (1) data related to manager's readiness for organizational change, to be measured by managers' own declaration in terms of their perception regarding being ready to face organizational change challenges, and (2) data related to the set of components of the Intercultural Competence construct. Due to the nature of the research question, two main data analysis stages of quantitative nature derived: (I) The first stage is targeted to collect data related to the components of the Intercultural Competence and data regarding Manager's Readiness to face Organizational Change decisions and actions. To do so, a data collection instrument was structured integrating 47 items upon the basis of the theoretical support presented in Table 3.

The instrument application is supported by a Pilot Test which includes data processing using Confirmatory Factor Analysis technique. This stage is completed once that statistical tests corroborate a reliable fit of data within the model, assuring reliability and validity.

(II) For the second stage of analysis, (a) the main twelve components of the Intercultural Competence construct are used as independent variables in a regression analysis model being Managers’ Readiness for Change-the dependent variable-, measured by manager’s own perception, and (b) Confirmatory Factor Analysis is executed to find the interrelations among the twelve main variables regarding intercultural competence, in order to discover possible association into different dimensions since they were divided a priori, as explained before.

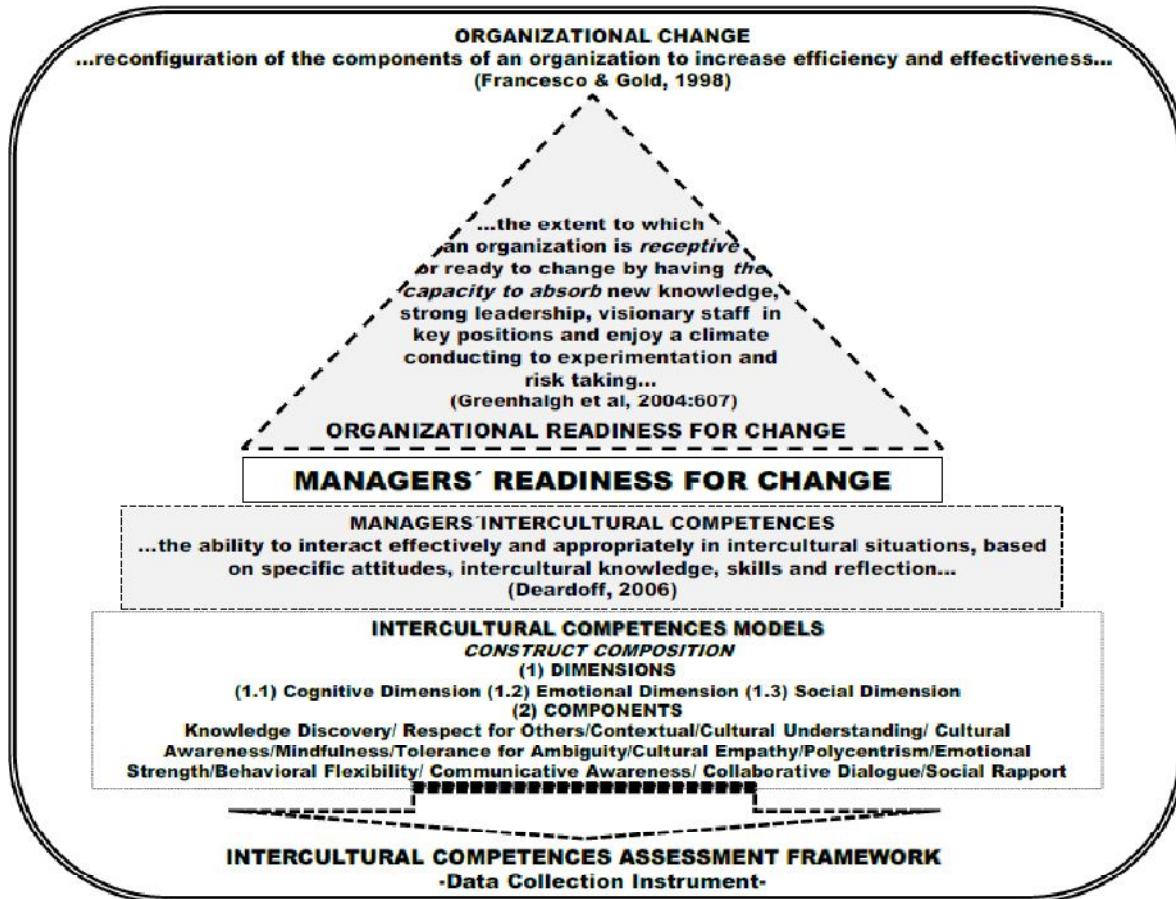


Diagram 3: Structural Framework & Operational Definitions supporting the Data Collection Instrument

4.2 Data Collection Instrument

The research framework from Diagram 3 presents the analytical platform used in consistency with preceding literature that suggest that intercultural competence influences behavior, and with several studies that have confirmed a direct positive correlation between individuals’ attitudes, abilities, beliefs communication skills (Holt et al., 2007; Armenakis, 1997) and their predisposition for change. Upon this framework, the questionnaire is structured by six parts, from which variables labels are drawn (Table 5). Part 1 is based on the demographics of the sample, being nine questions oriented to identify basis for Intercultural Competence development by means of family context. As a segment of Part I, is included a five-point scale formulated to self asses the Managers’ intercultural capabilities distributed in the three main dimensions, cognitive, emotional and social; described in the conceptual framework and for which a specific Factor Analysis was performed as an additional test for the validity of the distribution of variables within the three components. Part II concerns the individual’s personal multicultural experience, with the purpose to learn about the nature of the manager’s level of “multiculturalism.” This information is composed by fourteen questions/items. Part III focuses on the dependent variable: manager’s level of readiness for change, including for that purpose 16 items, shortening the name to Readiness for Organizational Change is given the label ORC, this is the second variable required as base of the analysis developed in this study.

Part IV relates to the independent variables arena, is structured by 15 items from the Intercultural Cognitive competences dimension. Part V contains 15 items from the second set of components of the independent variable construct related to Intercultural Emotional capabilities. Part VI includes 15 items from a four components set of the Intercultural Social Skills dimension of the Intercultural Competence construct.

Table 5: Data Collection Instrument Structure and Variables Labels

Profile/Variable	Label	ITEM
Type of Family	FAM	Q. 1
Type of Manager	TYP	Q. 2
Part I. Demographics		
- Gender	GEN	Q. 3 – Q. 8
- Group of age	AGE	
- Country of origin (culture)	NAT	
- Marital status	STA	
- Educational level	EDU	
- Experience as a manager	EXP	
- Level of Management	LEV	Q. 9
Part II. Individual multicultural experience		
Personal Multicultural Experience	MCE	Q. 20 – Q. 23
DEPENDENT VARIABLE		
Part III. Managers' readiness for change		
Readiness for Organizational Change	ORC	24 to 39
INDEPENDENT VARIABLES		
Part IV. Intercultural cognitive capabilities		
1. Knowledge Discovery	KDI	Q. 40 – Q. 43
2. Respect for Otherness	RFO	Q. 44 – Q. 47
3. Contextual Understanding	CUN	Q. 48 – Q. 51
4. Cultural Mindfulness	CMI	Q. 52 – Q. 55
Part V. Intercultural emotional abilities		
5. Tolerance of Ambiguity	TAM	Q. 56 – Q. 59
6. Cultural Empathy	EMP	Q. 60 – Q. 63
7. Polycentrism (openness)	POL	Q. 64 – Q. 67
8. Emotional Strength	EMS	Q. 68 – Q. 71
Part VI. Intercultural social skills		
9. Behavioral Flexibility	BFL	Q. 72 – Q. 75
10. Communicative Awareness	COA	Q. 76 – Q. 79
11. Collaborative Dialogue	CDI	Q. 80 – Q. 83
12. Social Rapport	SRA	Q. 84 – Q. 87

Initial Factor Analysis (pretesting) with a pilot version applied to sixty voluntary respondents provided feedback, that lead to few minor changes concerning clarity of some questions. The pilot sample became also a part of the whole respondent group since no major inconsistencies were found. Since both independent and dependent variable items in this study were answered by the same person, it was necessary to conduct an additional reliability test through Cronbach's Alpha coefficient, whose results in a range from .705 to .836 indicates that scales have sufficient internal reliability (Nunnally, 1978).

4.3 Key Respondents Characteristics

The targeted managers population of this study addresses as specific group of informants with the following requisites: (a) from all over the world, (b) of either industrial or commercial international organizations and, (c) who have among their subordinates, at least a certain percentage from diverse cultural backgrounds. As part of the delimitation of the population, there have been considered only managers pertaining to three basic levels of management: (1) top-level managers, who are at the corporate strategic level and their role is decisional as being responsible for long-term goals and objectives, (2) middle-level managers, who are basically at the tactical level and play an Interpersonal role by being responsible for monitoring progress in order to meet goals; (3) first-level managers, whose role is rather informational as being responsible for day-to-day operational affairs. The characteristics of the population in this case, are highly valuable since the data gathering reported informants from fifty five different countries and from managers of sixty eight different nationalities. Thus, the eligible participants (managers) are impartial and legitimate for the subsequent sample framing. The questionnaire was sent by email containing a link to the online survey.

4.4 Sample Size

According to the literature on sampling configuration, this research implies a unit of analysis within the probabilistic type which was originally pre-estimated in no less than 300 respondents —sample size recommended by Nunnally (1978) for scale measuring— in order to count on a sound base for a more reliable information towards statistical analysis. Beyond all initial expectations, the sample reported a number of 557 respondents (from a list of one thousand respondents) in total at the point of the set deadline. The data collection process was conducted during the period comprised between December 5th 2010 and March 31st 2011, and the size of the sample was therefore determined by the maximum number of respondents collected within the 120-day period in which the questionnaire was available online (Vallejo García, 2012). The data collection process started with a list of over one-thousand international master alumni from about 14 higher education institutions graduated at least five years ago. The questionnaire was sent to each of them individually with a personalized message in which they were invited to participate in the research project. In order to guarantee and respect the characteristics of the population, they were asked to only respond to the questionnaire only if they had a managing position at an international corporation for more than one year. The strategy then, consisted of asking each individual to also send the questionnaire to at least five other managers within their organization, thus creating a spread-effect and increasing the volume of response. The result in terms of number of respondents increased in 25% of the total number of inquiries sent. The latter of course is a result of the spread-effect designed for volume increase.

Additionally, a record-keeping strategy was defined in order to follow up the flow of incoming responses; this is, managers who were contacted and did not respond within two weeks, were contacted again personally for a reminder and a third time in some cases. The electronic questionnaire included a programming setting which allowed identification of the IP address of the respondent and therefore tracking of the country and organization from which he or she was responding the questionnaire; moreover, no incomplete questionnaires were received since a programming lock required filling out each field in order to be able to submit the questionnaire. It could be argued that this is a convenience sample though it is important to keep in mind the probabilistic nature as spreading the prospective informants beyond any personal or social network presupposes a good level of objectivity.

4.5 Data Processing Techniques

Internal reliability analysis was conducted using SmartPLS version 2.0 M3. PLS stands for Partial Least Squares and includes an algorithm calculation which produces a detailed report on cross loadings for the verification of the reliability coefficient between survey questions. This application was also used for the linear regression because of its advantages related to the possibility of testing and visualizing the whole model in one graphical representation showing the correlations between variables and their respective level of significance. This analysis is a basic requirement for the Research Question. For the analysis of t-student, standard-error and level of significance, and to run the confirmatory factor analysis required to verify the consistency of the main components of the research model, SPSS version 12.0 for Windows was chosen as a complementary package. This program was tested with the pilot project and all necessary functionalities were tried in order to assure further data treatment with the main study.

Statistical Significance analysis and distribution tests, were run through an open source application used by econometrics known as Gretl (version 1.9.2csv), standing for (GNU Regression, Econometrics, and Time-series Library). This application provides the possibility of testing variables with linear regression as in SPSS but with the main advantage that presents the correlations indicating the level of significance (probability-value) with an asterisk for easier identification. However, the most relevant feature for which this package was selected are the collinearity and nonlinearity tests, and normality of residual which is presented in a graphical way. Other very valuable characteristics of this software are the ANOVA test, the heteroscedasticity test and, the graphical residual plots from the regression. In this research since the twelve main variables regarding intercultural competence were divided a priori into the three components, therefore is necessary to test and prove that such variables are accurately distributed and allocated amongst the three components. For this reason, to find the interrelations among variables in order to discover possible association into different dimensions, a Confirmatory Factor Analysis was conducted.

5. Results

5.1 Ensuring Validity and Reliability

5.1.1 Demographics

In this research, participant managers' profile fits with young persons in the range between 20-40 years (95%), with mono cultural family background (80%). Mostly single and well educated at bachelor and master level (94%), performing managerial positions as Local Country National (50%) and Host Country National (21%) employees. This population is concentrated in the 1-3 years of experience (35%) being consistent with their age and their position as middle (51%) and first level management (39%). Most of respondents (45%) declare that their intercultural training exposure come from both university and job training. The majority of participants (53%) are from Europe -mainly Germany-, followed by Latin America (25%). The participation of managers from North America, Asia and Africa supports the requisites defined for the respondents of the questionnaire of this research. Table 6. provides detailed information regarding participants' profile.

Table 6: Sample Demographics (N = 557)

Profile	Frequency	(%)	Cumulative (%)
Gender			100%
Male	253	43%	
Female	304	57%	
Age (years)			100%
20 – 30	433	78%	
31 – 40	97	17%	
41 – 50	17	3%	
51 – 60	10	2%	
Family cultural condition			100%
Mono cultural	445	80%	
Bicultural	97	17%	
Multicultural	15	3%	
Marital status			100%
Single	406	73%	
Married	135	24%	
Divorced	16	3%	
Educational level			100%
Ph.D.	10	2%	
Master	322	58%	
Bachelor	204	36%	
Certificate	21	4%	
Type of employee			100%
LCN- <i>Local Country National</i>	279	50%	
HCN <i>Host Country National</i>	120	21%	
FCN- <i>Foreign Country National</i>	98	18%	
PCN- <i>Parent Country National</i>	23	4%	
TCN- <i>Third Country National</i>	37	7%	
Work experience as manager (years)			100%
<1 year	123	22%	
1-3 years	193	35%	
3-5 years	94	18%	
5-10 years	76	13%	
>10 years	71	12%	
Management level			100%
Top-level	55	10%	
Middle-level	286	51%	
First-level	216	39%	
Intercultural training exposure			100%
Never had intercultural training	69	12%	
Training only at university	176	32%	
Training only after school	63	11%	
Training both in school and after	249	45%	
World region			100%
Europe	294	53%	
Latin America	142	25%	
North America	53	9%	
Asia Pacific	38	7%	
Middle East	27	5.46%	
Africa	3	0.54%	

5.1.2 Statistical Tests

To corroborate a reliable fit of data within the model, a test of normality of distribution was executed with an application available in the SPSS package by using standardized predicted values with a plot function. The histogram revealing the distribution of the data within the model considering frequency and the standardized residuals resulting from the regression shows normality. As part of the uniform distribution test to identify a possible heteroscedasticity problem, a normal probability plot was commanded using SPSS. The resulting graph confirmed that the behavior of the data complies with the expected consistency in relation to the dependent variable. To further corroborate the data distribution, another visual testing called scatterplot was used in order to further corroborate the data distribution assessment. According to an SPSS guide by Abu-Bader & Pryce, et al (2006), there exists no heteroscedasticity or non-relevant level of heteroscedasticity when the residual plot visual representation shows a rather “spherical” form, such as in this case, where the residuals also seem normally distributed, results from this test are consistent with this assumption. White’s heteroscedasticity test run with Gretl Software confirms the square of error variances for each independent variable and all values appear to be close to zero as expected in conformity with the reliability of the model.

Reliability is identified by showing the cross-loading report of Cronbach’s alpha coefficient, with results in a range of .831 to .706 consistent with Nunally’s reliability criteria for social sciences. To measure the proportion of variance embedded in a construct by exposing the ratio resulting from the sum of the variance present in the construct (Gefen et al. 2000) is used the Average Variance Extracted (AVE) as an indicator of the captured variance by one factor in relation to the variance resulting from a measurement error (Fornell and Larcker, 1981). According to the regulating parameters of this concept, an AVE higher than 0.5 is considered acceptable. Table 7 shows the correspondent AVE for each of the core variables with most values over 0.6 as indicator. The same table shows also the alpha reliability values for each variable and additionally it also shows the R Square with a value of 0.526 (test run with SmartPLS) which basically means that these variables explain at least 52.6% of the phenomenon. This means the percentage that these selected variables have as influencing factors of managers’ readiness for organizational change.

Table 7: Average Variance Extracted (AVE)

VARIABLE	AVE	RELIABILITY	R-SQUARE	ALPHA	COMMUNALITY	REDUNDANCY
ORC	0.546	0.951	0.526	0.944	0.546	0.057
KDI	0.620	0.867	0.000	0.798	0.620	0.000
RFO	0.624	0.869	0.000	0.800	0.624	0.000
CUN	0.666	0.889	0.000	0.833	0.666	0.000
CMI	0.621	0.868	0.000	0.797	0.621	0.000
TAM	0.579	0.846	0.000	0.758	0.579	0.000
EMP	0.643	0.878	0.000	0.814	0.643	0.000
POL	0.629	0.871	0.000	0.803	0.629	0.000
EMS	0.651	0.882	0.000	0.821	0.651	0.000
BFL	0.645	0.879	0.000	0.817	0.645	0.000
COA	0.643	0.878	0.000	0.815	0.643	0.000
CDI	0.602	0.858	0.000	0.779	0.602	0.000
SRA	0.660	0.886	0.000	0.828	0.660	0.000

In a linear regression, collinearity is normally related to standard errors for the estimates of a slope that can result in high uncertainty and unreliability of the data analyzed (Lewis-Beck, 1995), for this reason, in this research is important to measure to what extent collinearity is present in the model. According to the literature on social science research, collinearity becomes problematic if the values are higher than 10.0, being that collinearity values after test should be lower than 4.0 for a reliable estimation. In this research, the pertinent collinearity test was performed using Gretl-Software version 1.9.2.csv contrasting all core independent variables against each other, generating results showing that the values corresponding to each variable do not exceed the minimum desirable of 4.0 which can be assumed that no high collinearity is present so the estimates are reliable for the purposes of the regression. To verify that all independent variables are linearly correlated with each other and also correlated with the dependent variable, Pearson’s correlation of variables test was used. Results of this quality criteria test are presented in Table 8. where is observed that all variables present significant positive correlation.

There was no surprising due to the fact that all these independent variables are related to the notion of intercultural competence and therefore are highly associated.

Table 8: Pearson's Correlation of Variables

	ORC	KDI	RFO	CUN	CMI	TAM	EMP	POL	EMS	BFL	COA	CDI	SRA
ORC	1.00												
KDI	.426**	1.00											
RFO	.505**	.553**	1.00										
CUN	.532**	.663**	.592**	1.00									
CMI	.555**	.542**	.545**	.716**	1.00								
TAM	.576**	.533**	.537**	.581**	.576**	100.0							
EMP	.506**	.479**	.493**	.554**	.583**	.547**	1.00						
POL	.494**	.365**	.455**	.417**	.470**	.494**	.514**	1.00					
EMS	.506**	.328**	.379**	.527**	.472**	.518**	.434**	.500**	1.00				
BFL	.524**	.451**	.457**	.529**	.529**	.514**	.487**	.420**	.404**	1.00			
COA	.475**	.487**	.395**	.587**	.587**	.470**	.573**	.391**	.402**	.517**	1.00		
CDI	.559**	.390**	.397**	.523**	.523**	.545**	.538**	.464**	.513**	.509**	.578**	1.00	
SRA	.571**	.523**	.453**	.500**	.500**	.574**	.512**	.441**	.436**	.520**	.480**	.576**	1.00

** Correlation is significant at the 0.01 level **

Listwise N=557

5.2 Research Findings

5.2.1 Intercultural Competences Components

Focusing in the research objective stated as the identification of the Intercultural Competences structural components that determine manager's readiness for organizational change, findings emerge from results of the linear regression analysis performed to identify the relation between each of the twelve components of the Intercultural Competence construct, -twelve independent variables,- with manager's readiness for organizational change, considered the dependent variable (Table 9).

**Table 9: Quantitative effects of the 12 causal variables upon Managers' Readiness for Change (ORC).
Linear Regression Analysis Results**

VARIABLE	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	RESULT
	β	Std. Error	beta			
KDI	-0.014	0.060	-0.010	-0.235	0.815	Rejected
RFO	0.162	0.051	0.128	3.185	0.002 ***	Accepted
CUN	0.023	0.061	0.019	0.382	0.702	Rejected
CMI	0.143	0.060	0.112	2.391	0.017 **	Accepted
TAM	0.169	0.059	0.124	2.853	0.005 ***	Accepted
EMP	-0.007	0.053	-0.006	-0.136	0.892	Rejected
POL	0.085	0.042	0.077	2.027	0.043 **	Accepted
EMS	0.123	0.044	0.106	2.799	0.005 ***	Accepted
BFL	0.167	0.050	0.132	3.364	0.001 ***	Accepted
COA	0.008	0.051	0.006	0.149	0.881	Rejected
CDI	0.164	0.054	0.130	3.018	0.003 ***	Accepted
SRA	0.194	0.054	0.152	3.613	0.000 ***	Accepted

($p \leq 0.001$ *** $p \leq 0.01$ ** $p \leq 0.05$ * $p > 0.05$ n.s.)

Diagram 4 illustrates graphically the relational model of the research objective. This stage of analysis allows identifying eight components of the Intercultural Competences construct related to managers' readiness for change, understood as the extent to which a manager is prepared to be involved in the reconfiguration of the components of an organization to increase efficiency and effectiveness. These findings suggest that is reasonable to consider that a composite of attitudes such as respect for others (RFO), collaborative dialog (CDL) and social rapport (SRA) surfaces inner traits such as emotional strength (EMS), openness (POL) and tolerance for ambiguity (TAM). This set of components leads to perform external behaviors of the kind of cultural mindfulness (CML) and behavioral flexibility (BFL), suggesting that Intercultural Competence is not the single factor that promotes readiness for change either in the manager or in the organization.

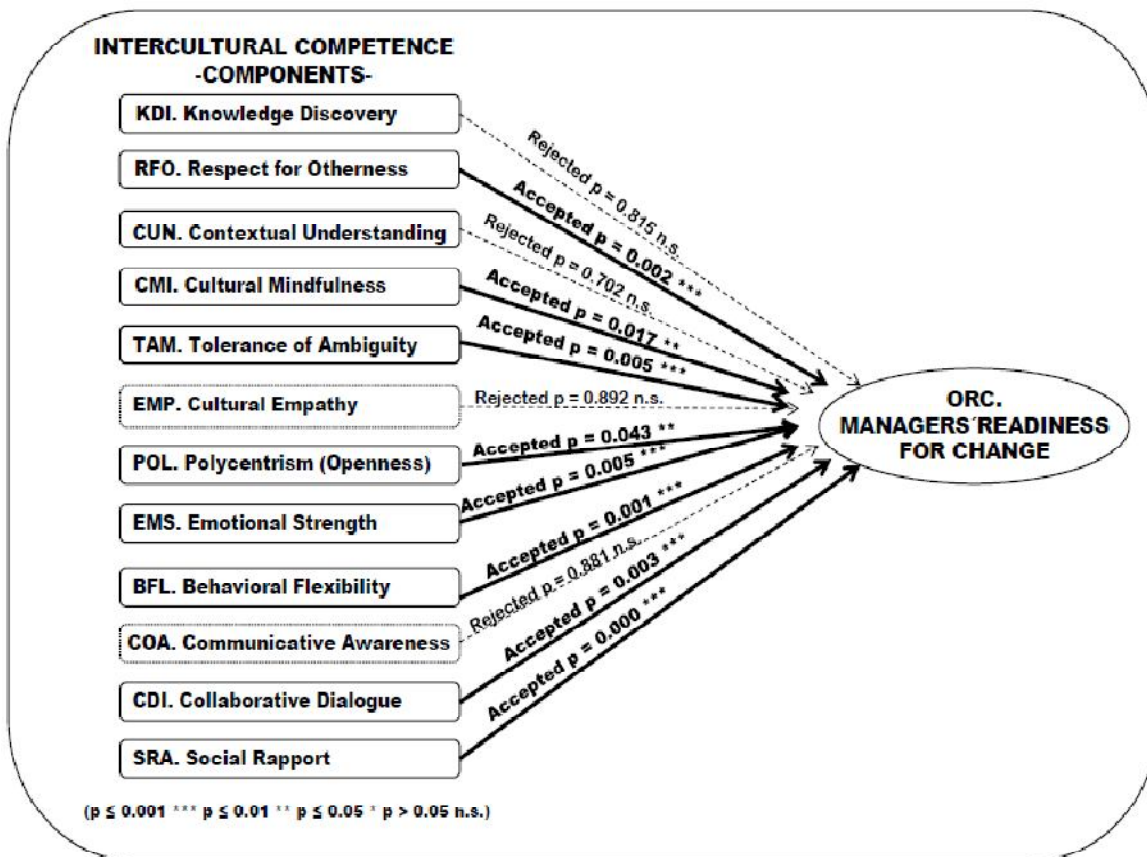


Diagram 4: Intercultural Competences. Dimensions and components influencing Managers’ Readiness for Change

5.2.2 Managers Readiness for Change

From the definition of readiness for change (Walinga, 2008), as being “prepared mentally and physically for an experience or action,” is reasonable to consider that readiness is a mental state of willingness, an inclination to respond promptly to a given change. Based on this perspective, the dependent variable analysis considers four main components, from which three are accepted in the regression analysis (Table 10). Findings summarized in Diagram 5 provide an answer to the research question, suggesting that components of the Intercultural Competences construct related to Managers’ Readiness for Change are concentrated in the Emotional and Social dimensions. This result suggests that managers’ attitudes such as (1) tolerance of ambiguity, referring to the acceptance of uncertainty -which implies a capability to deal with multiple meanings, vagueness, incompleteness, inconsistencies or contradictions-; (2) openness to new experiences –a precondition for change readiness,- and (3) emotional strength –as in the notion of emotional stability, extraversion and agreeableness-, are externalized as change supportive behaviors (Hornung & Rousseau, 2011:1665) such as (4) flexible behavior considered as the adaptability and capacity to adjust conduct according to the context and circumstances; (5) collaborative dialogue predisposition -aiming to prevent or restore possible disturbances in the communication process-; and (6) social rapport, conceived as the ability to achieve a relation of harmony and concordance.

5.2.3 Hypotheses Validation

Results of the regression analysis reveal that eight, out of the twelve, core variables of the Intercultural Competence construct result to be positively correlated with managers’ organizational readiness for change. This means that 66.67% of the hypotheses are validated. To make sure that the three groups of four variables each would be correctly associated and allocated within the three components, a confirmatory factor analysis was run providing a three factor solution corresponding to the three competences dimensions: Factor 1. Cognitive Dimension (KDI, RFO, CUN), Factor 2. Interpersonal Dimension (POL, EMS) and Factor 3. Social Dimension (COA, CDI, BFL). The model was tested and each component analyzed as general hypotheses called cognitive (COG), emotional (EMO) and behavioral/social (SOC).

Table 10: Managers’ Readiness for Change (ORC). Linear Regression Analysis Results

VARIABLE	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	RESULT
	β	Std. Error	beta			
MCE Multicultural Experience	-0.097	0.047	-0.079	-1.932	0.561	Rejected
LEV Level of Management	0.132	0.038	0.114	3.465	0.01 ***	Accepted
TYP Type of Manager	0.051	0.020	0.084	2.507	0.012 **	Accepted
ITE Intercultural training	0.058	0.019	0.091	3.024	0.003 ***	Accepted

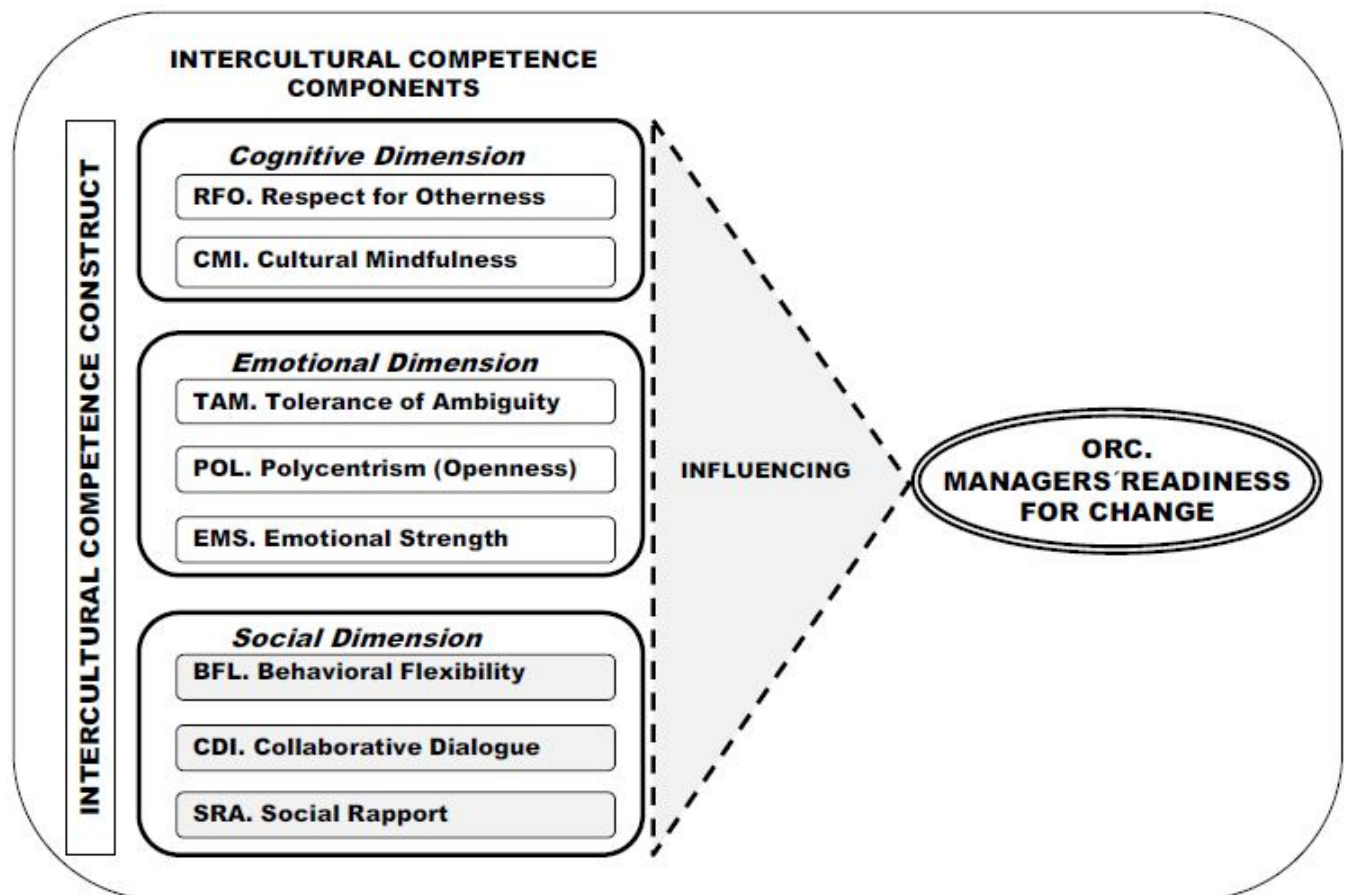


Diagram 5: Intercultural Competences. Dimensions and Components Influencing Managers’ Readiness for Change

The formative model was tested and each component analyzed as general hypotheses called cognitive (COG), emotional (EMO) and behavioral/social (SOC). Table 11. shows the analysis of convergent validity of the formative components, as can be observed each formative item presents a higher loading though the R2 remains with a similar value explaining at least 50% of the model.

Table 11: Convergent Validity Analysis of the Model’ Formative Components

VARIABLE	AVE	Reliability	R Square	Alpha	Communality	Redundancy
ORC	0.546	0.951	0.509	0.944	0.546	0.085
COG	0.702	0.904	0.000	0.858	0.702	0.000
EMO	0.626	0.870	0.801	0.626	0.626	0.000
SOC	0.647	0.880	0.000	0.819	0.647	0.000

6. Conclusion

This paper contributes to gain understanding in the change readiness construct moving the spotlights from cognitions or beliefs that underlie change readiness (cf. Armenakis, et al, 1993; Armenakis et al., 2007) to the affective element of this change attitude, as reflected by the Intercultural Competences components identified. Grounded on attitude theory is found the argument that it is essential to consider both the cognitive and affective aspects of change readiness when defining and (112 *Journal of Management* / January 2013) measuring this construct. Both theoretical and empirical studies support the distinctiveness of the cognitive and affective elements of an attitude, with the overall evaluative judgment that is an attitude (Trafimow & Sheeran, 1998; van den Berg, Manstead et al, 2006). The attitude perspective has been considered as one of the key issues of the Technology Readiness for change, as is considered to be the propensity of individuals and organizations to adopt and embrace cutting-edge technology for accomplishing goals (Parasuraman, 2000), considering their infrastructure availability, positive attitude towards technology and the skills and knowledge required to operate the technology (Leonard-Barton, 1982). Intercultural Competences components identified in this research in terms of attitudes and behaviors are valuable assets for managers involved in Management of Technology (MOT) activities such as technology change management, technology transfer and technology supplier's selection.

Being clear that results does not equal causation, this paper support the notion that viewing intercultural competence, -either as a valid concept and as a fruitful one which greatly determines readiness for change-, can expand into a strategy for organizations to manage transformation. From a theoretical perspective, the results of this research on readiness for change and intercultural competence provides valuable information which can be compared, conciliated and made compatible with the models presented in the literature at both levels intercultural competence and readiness for change. Findings of this research are consistent with Armenakis et al. (1993) when concluding that the manager's need for change is related to the opportunities to take part in the actual process of change, as well as with the Management of Technology change perspective regarding the positive attitude, and the skills and knowledge required to operate the technology (Leonard-Barton, 1982). Upon this basis, is reasonable to conclude that Readiness for Change is delimited by soft skills such as cognitive competences, emotional abilities and social behavioral skills. Particularly interpersonal competences or behavioral-social skills are remarkably relevant as influencing factors in terms of organizational readiness and the response to the transformations among work, people, structures and culture of the organization as predicted two decades ago(Nadler et al, 1995).

Study' Limitations

Being focused on a single component of Manager' Readiness for Change, further analysis is expected to determine the weight of the Intercultural Competences variable within the construct configurative variables. Even when the data collection instrument resulted with satisfactory reliability, best performance could be explored refining the measures for the dependent variable, from perceptions –as it is here- to factual based scales.

References

- Abu-Bader, S., Pryce, J., Shakelford, K. and Pryce, D. (2006). *Using Statistical Methods in Social Work Practice. A Complete SPSS Guide*. Pearson Education, Canada.
- Agten, J. (2007). *Bologna as a frame for Competence Based Learning and Supervision?* Katholieke Hogeschool Kempen, Belgium. (Online). European Association of Schools of Social Work, Maastricht, NL: Available: <http://www.eassw.org> (July 9. 2010).
- Amatayakul, M. (2005). ERH? Assess Readiness First. *Healthc Financ Manage*, 59 :112-113.
- Armenakis, A., Bernerth, J., Pitts, J., & Walker, H. (2007). Organizational Change recipients 'beliefs scale development of an assessment instrument. *The Journal of Applied Behavioral Science* 43 (4):481-505.
- Bailey, E. K. and Cotlar, M. (1993). *Managing Globally with Technology*. *Leadership & Organization Development Journal*, Vol. 14 (3):21-24.
- Barabel, M., Meier, O. (2010). *Manageor. Les Meilleures pratiques du management*. 2^éédition, Paris, DUNOD (Chapter 2).
- Barmeyer, C. (2004). "Peut-on mesurer les compétences interculturelles? Une étude comparée France-Allemagne-Québec des styles d'apprentissage" in: Simard, Gilles, Lévesque, Ginette (Ed.): *La GRH mesurée. Actes XVe congrès AGRH, Montréal 2004*, S.1435-1462.
- Bartel-Radic, A. (2009). La compétence interculturelle: état de l'art et perspectives. *Management international / International Management / Gestión Internacional*. Vol. 13, Num. 4:11–26.

- Beamer, L. (1992). Learning intercultural communication competence. *The Journal of Business Communication*. Vol. 29:285-303.
- Boyatzis, R. E., Stubbs, E. C., & Taylor, S. N. (2002). Learning cognitive and emotional intelligence competencies through graduate management education. *Academy of Management Learning and Education*, 2 :150-162.
- Byram, M. (1997). *Teaching and Assessing Intercultural Communicative Competence*. In Spencer-Oatey, H. and Franklin, P. (2009). *Intercultural Interaction: A Multidisciplinary Approach to Intercultural Communication* (60-61). London. Macmillan Publishers Limited.
- Brockbank, W., Ulrich, D., & Beatty, R. W. (1999). HR professional development: Creating the future creators at the University of Michigan Business School. *Human Resources Management*, 38 :111-118.
- Burgelman, R., Maidique, M. (1983). *Strategic Management of Technology and Innovation*. IRWIN (Chapter 1).
- Burnes, B. (1996). *Managing change: A strategic approach to organizational dynamics*. London. Pitman.
- Cooley, R. and Roach, D. (1984). *Theoretical approaches to communication competence: A Conceptual framework*. Competence in communication. United States. Ed. by Bostrom. SAGE.
- Cui, G. and Van den Berg, S. (1991). Testing the Construct Validity of Intercultural Effectiveness. *International Journal of Intercultural Relations*. Vol. 15, Num. 2 :227-241.
- Deardorff, D. (2006). Identification and Assessment of Intercultural Competence as a Student Outcome of Internationalization. *Journal of Studies in International Education*. 10(3) :241-266.
- Duong Quynh L. (2005). *La Responsabilité sociale de l'entreprise, pourquoi et comment ça se parle ? Communication et Organisation*, 26 Presses Universitaires de Bordeaux :26-43.
- Erosa, V. E. (2013). Technology Policy Implementation Road: Exploring Firms' Technology Readiness in a Mandatory Vertical Diffusion Environment. *Journal of Service Science and Management*, Vol 6 No. 5A :20-31. Doi:10.4236/jssm.2013.65A003.
- Erosa, V. E., and Arroyo, P. (2003). Análisis de la Capacidad Empresarial (Readiness) para la alineación de bases de datos entre cliente-proveedor. *Organizational Readiness Analysis for data base alignment among clients and suppliers*. Boletín de Política Informática . Número 5. Instituto Nacional de Informática y Geografía. INEGI. México. : 17- 49.
- Erosa, V., Arroyo, P. (2009). Aligning Top Management MOT Competences with the Business Strategy. In CD Proc. Int. Conf. PICMET 09, Portland, USA. T. Anderson (ed). : 2190-2199.
- Erosa, V. Ramirez, P., Ortiz, J. (2008). Professional Competences for Managers: Employers, Students, Alumni and Teachers Perspective. The Mexican Case. IN 6x4 UEALC Project, Final Report (279- 324) (Online) available: http://www.6x4uealc.org/site2008/p01/6x4_p01c.pdf (March, 2015).
- European Commission. (2002). *Tuning Education Structures in Europe*. Closing Conference, Brussels, May 31, 2002 :22.
- Francesco, A. M. and Gold, A. (1998). *International Organizational Behavior: Text, Readings, Cases, and Skills*. New Jersey. Prentice Hall.
- Fornell, C. and Larcker, D. (1981). "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error." *Journal of Marketing Research*. Vol. XVIII. :39-50.
- Gertsen, M. (1992). Intercultural Competence and Expatriates. *International Journal of Human Resource Management*. Vol. 1 Issue 3, :341-362.
- Griffith, D. and Harvey, M. (2000). An Intercultural Communication Model for use in Global Interorganizational Networks. *Journal of International Marketing*, 9 (3) :87-103.
- Grouard, B. and Meston, F. (1998). *L'Entreprise en mouvement: conduire et réussir le changement*. Paris. DUNOD.
- Hafsi, T. and Fabi, B. (1997). *Les fondements du changement stratégique*. Montreal. Transcontinental Editions.
- Herscovitch, L., Meyer, J. (2002). Commitment to Organizational Change: Extension of a three- component model. *Journal of Applied Psychology*, 87 :474-487.
- Hofstede, G. J. (2009). "Research on cultures: how to use it in training?" *European J. Cross-Cultural Competence and Management*. Vol. 1 Num 1, :18.
- Holt, D., Armenakis, A., Harris, S. and Field, H. (2006). Toward a Comprehensive Definition of Readiness for Change: SA Review of Research and Instrumentation. In *Research in Organizational Change and Development*. Greenwich, CT: JAI Press: 289-336.
- HOFF, J. (2008). "Growth and Transformation Outcomes in International Education." In Savicki (Editor). *Developing Intercultural Competence and transformation: Theory, Research and Application in International Education* (:55). Sterling. Stylus Publishing, LLC.
- Hornung, S. and Rousseau, D. M. (2007). Active on the job – proactive in change: How autonomy at work contributes to employee support for organizational change." *Journal of Applied Behavioral Science*, 43, 401-426.
- Kane, M. (1992). "The assessment of professional competence". *Education and the Health Professions* ;15:163-182.

- Keeling, R. (2006). The Bologna Process and the Lisbon Research Agenda: the European Commission's expanding role in higher education discourse. *European Journal of Education*, Vol. 41, No. 2, :203-223.
- Kozlowski, S., and Klein, K. (2000). A Multilevel approach to theory and research in organizations: Contextual, temporal and emergent processes. In K. Klein and W. Kozlowski (Eds.), *Multilevel theory, research and methods in organizations*. (:3-90). San Francisco: Jossey-Bass.
- Kühlmann and Stahl. (1998). translated by Franklin in Spencer-Oatey, H. and Franklin, P. (2009). *Intercultural Interaction: A Multidisciplinary Approach to Intercultural Communication*. London. MacMillan Publishers Limited. : 217-18.
- Knapp, K. (1995). Interkulturelle Kommunikationsfähigkeit als Qualifikationsmerkmal für die Wirtschaft. In: Bolten, J. (Ed.): *Cross Culture - Interkulturelles Handeln in der Wirtschaft*. Sternenfels, :8-23.
- Kreitner, R., and Kinicki, A. (1998). *Organizational Behavior*, Irwin- Mc Graw-Hill :625.
- Leonard-Barton, D. (1982). *Applying Innovations Diffusion Theory to the Management of Change*. Working Paper No. 1295-82, Alfred P. Sloan School of Management. Massachusetts Institute of Technology.
- Lewin, K. (1951). *Field Theory in Social Science: Selected Theoretical Papers*. Harper & Row.
- Lewis-Beck, M. (1995). *Data Analysis: An Introduction*. Series: Quantitative Applications in the Social Sciences. California, SAGE Publications.
- Madsen, S., Miller, D., John, C. (2005). Readiness for organizational change: Do organizational commitment and social relationships in the workplace make a difference? *Human Resources Development Quarterly*, 16 :213-233.
- Mansfield, R. S. (1996). Building competency models: Approaches for HR professionals. *Human Resource Management*, 35, 7-18.
- McClelland, D. (1973). Testing for competence rather than intelligence. *American Psychologist*, 28, :1-14.
- McGuiness, T., Morgan, R., Oxtoby, B. (2002). Organizational Change capability: The Theoretical Construct and its Operational Measurement. *Conference on Organizational Knowledge, Learning and Capabilities, Proceedings*. :1-14.
- McKenna, E. (2006). *Business Psychology and Organizational Behavior*. New York. Psychology Press. :5; 540.
- Medina-Walker, D., Walker, T., Shmitz, G., Brake, T. (2003). *Doing Business Internationally: The guide to cross-cultural success*. McGraw-Hill :55.
- Nadler, D. A. and M. Tushman. (1989). *Organizational Frame Bending: Principles for Managing Reorientation*. *Academy of Management Executive*, August :194-203.
- Nunnally, J. (1978). *Psychometric Theory*. (2nd. Ed). New York: McGraw-Hill.
- Ouchi, W. (1981). *Theory Z*. Reading, MA: Addison-Wesley Publishing Company.
- Parasuraman, A. (2000). Technology Readiness Index. A Multiple-Item Scale to Measure Readiness to Embrace New Technologies. *Journal of Service Research*. May. Vol 2. No. 4, :307-320.
doi: 10.1177/109467050024001.
- Peters, T., Waterman, R. (1982). *In Search of Excellence*. Harper & Row Publishers, Inc.
- Rafferty, A., Jimmieson, N., Armenakis, A. (2013). Change Readiness: A Multilevel Review. *Journal of Management*. Vol. 39 No. 1, January :110-135. doi: 10.1177/0149206312457417.
- Robbins, S., Judge, T. (2009). *Organizational Behavior*. 13th Ed. Chapter 1. Pearson Education Inc. . Prentice Hall, :5.
- Schein, E. H. (1992). The Role of the CEO in the Management of Change: The Case of Information Technology, in *Transforming Organizations*, (80-95). Eds T. A. Kochan and M. Useem. New York: Oxford University Press, 1992.
- Spitzberg, B. and G. Changnon (2009). Conceptualizing Intercultural Competence. In Deardorff (Ed.) *The SAGE Handbook of Intercultural Competence*. :11-40.
- Stier, J. (2002). *Going international – Becoming Intercultural*. *Pedagogic Communication*. School of Education, Vaxjo University.
- Ting-Toomey, S. and Kurogi, A. (1998). Facework competence in intercultural conflict: An Updated face-negotiation theory. *International Journal of Intercultural Relations*, 22, 187-225.
- Trafimow, D. and Sheeran, P. (1998). Some tests of the distinction between cognitive and affective beliefs. *Journal of Experimental Social Psychology* 34 (4) :378-397
- Vallejo García, J. L. (2012). *Intercultural Competence as a Conducive Factor of Managers' Readiness for Organizational Change*. Doctoral Dissertation, Unpublished. Université de Strasbourg. École Doctorale Augustin Cournot.
- Van Den Berg, H., Manstead, A., van der Pligt, J., and Wigboldus, D. (2006). The Impact of Affective and Cognitive focus on attitude formation. *Journal of Experimental Social Psychology* 42 :373-379.
doi:10.1016/jesp.2005.04.009.
- Weiner, B. (2009). A Theory of Organizational Readiness for Change. *Implementation Science* 4:67
- WEISS, H. (2002). Deconstructing job satisfaction: Separating evaluations, beliefs and affective experiences. *Human Resource Management Review*, 12 :173-194