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THE INFLUENCE OF CULTURE ON PROJECT MANAGEMENT – CASE STUDY: BRICA PORTUGAL

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In an international project such as the construction and installation of a new plant in a different country, the establishment of a project team, the interaction with authorities, the selection of new employees and local suppliers of materials or services, among many other aspects, assume particular sensitivity in a context where people with different experiences and cultures are expected to interact towards a specific common goal. Practices considered appropriate in certain countries may be harmful or even disastrous in others, so knowledge of specific cultural factors, as well as how best to fit in the company's procedures, constitute an important success factor in the project.

Keywords: Culture, International project, Management.

Introduction

In the current global economic environment, communication with people from different cultures is inevitable, whether in the labour context of a multinational company or simply in daily life, where we meet people from different nationalities and cultures, for example, in health, leisure and commerce organizations. Indeed, globalization (Hall, 2003), a process catalysed by the rapid development of telecommunication and information technologies, and greatly accelerated in the post-Cold War period, eliminated barriers and borders, transforming a relatively stable and confined reality in a context of strong interdependency between people of different backgrounds and companies, into something increasingly dynamic. This process is characterized essentially by reducing barriers,by straightforwardness of communication and logistics, thusbringing a huge interdependence between different actors and international economies, involving new actors, new markets, new rules and regulations, new communication tools and new management paradigms (Finuras, 2007).

Management philosophies had naturally to be redirected, and as Ceitil (2002) mentions, we have evolved from an expertise paradigm to a transversal one, with increased flexibility, centralization to decentralization and self-control to other-control, translated into the emergence of new decision-making centres and to the allocation of responsibilities to autonomous units.

Since organizations seek to achieve goals (Scott, 1998), it is important to know the factors that contribute to or affect their performance. Several organizational surveys converge on the understanding that organizational culture is vital in the functioning of organizations and has a

direct influence on their effectiveness. Various definitions of culture are found in the literature: a set of values that certain members share within an organization, making it different from the others (Robbins, 2005),a set of values, beliefs and technologies that holds together the most diverse members from all hierarchical levels, in the face of difficulties, everyday operations, goals and objectives. It is organizational culture that produces for many different audiences, in society and markets, the set of perceptions, icons, indexes and symbols that designated corporate image (Nassar, 2000), a representation of the perceptions of managers and employees of an organization, reflecting the prevailing mind set in the organization. For this reason it affects people's behaviour (Chiavenato, 1999).

For Price Waterhouse (1989), culture can be explained by categorization: values, beliefs, atmosphere, rules, symbols and philosophy.

According to Schein (1992) culture integrates, in coherent whole, rituals, values and behaviours, in a meaning shared by members and distinct in each organization, distinguishing three levels in the culture component framework. The levels represent the degree to which the phenomenon is noticeable: artefacts, visible values and standards of behaviour, assumptions or basic premises.

Hofstede (1997) proposes an "onion diagram", with concentric rings ranging from a peripheral, conscious and accessible level to layers of unconscious, deep and hard-to-reach levels, where the symbols are the gestures and words of special significance for those sharing a particular culture; the heroes are real or imaginary characters and taken as paradigms of behaviour; and rituals are fundamental collective expressions in order to achieve certain goals, where the values located in the deepest layer are the most difficult to access.

Culture may also be represented in the form of an "organizational iceberg" (Stoner e Freeman, 1982), where sensitive cultural aspects are on the surface, clearly visible, whereas a greater amount of other aspects, such as basic assumptions, are deeply hidden.

Neves (2000), based on Hofstede's model of the "onion layers", added two new layers. Thus, the first layer is associated with the organizational attributes that generate the climate; the second represents the individual attributes (individual's psychological field); the third layer corresponds to the behavioural component (artefacts); the fourth layer is about standards and behavioural norms; the fifth is composed of values, beliefs and ideologies and the last and deepest, in other words, the most unconscious,corresponds to assumptions or premises.

Research on the factors affecting the organizational climate is therefore very important to define the best strategies for management and for corporate internal communications, in order to make the best use of human resources. According to Chiavenato (1999), the "organizational climate", designation refers to the internal climate between the elements involved in an organization, and is directly related to the degree of motivation of its participants. When motivation is high, the motivational climate increases, raising satisfaction, excitement and interest levels (Bergamini, 1997). But when motivation is low, the organizational climate is affected, and it can produce situations of depression, apathy, dissatisfaction or aggression, affecting how organization employees interact with each other and with external elements.

Several studies have been conducted to improve understanding of the impact that local and national cultural differences may introduce to processes of organizational management. However, it is important to know how, and by what ways, these differences manifest themselves (Hall and Hall, 1990;Ranf, 2010; Zait, 2002).

Knowledge of prevailing contexts of the speaker's cultures, in terms of business and management, can be critical to the success of negotiations or projects involving multicultural

teams, because communication and relationship problems that prevent large projects occur easily (Binder, 2007).

Hofstede (1997), while employed by IBM, and based on extensive research conducted in several countries, has developed a system of patterns and meanings in how to think and act in order to characterize and distinguish a group of individuals. The model,based on statistical data collected on a large scale, providesindications of likely behaviours, but evidentlycannot characterize an individual in advance, merely because of belonging to a particular group. The model comprises five dimensions of Hofstede's cultural reality, based on the assumption that human society faces a number of common issues, regardless of their spatial-temporal location: Power Distance (PDI), Individualism (IDV), Masculinity (MAS), Uncertainty Avoidance (UAI) e Long Term Orientation (LTO).

The correlation of these dimensions characterizes a society, which can be defined as a group from a particular country, and provides indications as what to be expected from a given individual'sbehaviour in a given country. Hofstede's model, extensively used worldwide, is not exempt from criticism, particularly regarding generalization, because not all individuals of a given country fit the profile for this country, nor the possibility of a complex multidimensional variable,as culture is, being fully described by five dimensions, is totally accepted (Cunha *et al*., 2007).

It has been shown, both in a business and a sports or military context, that the way people are managed has a significant influence on their performance. Therefore, knowledge about motivation mechanisms, as well as best practices in leadership, is particularly important when we intend to develop a project in an unfamiliar environment and often characterized by a high level of ambiguity (Cunha and Rego, 2009).

This research aims to identify factors and procedures which can improve the chances of success of an international project, particularly in geographic areas where BRICA plans new investments, such as Asia, America or Eastern Europe, but also to increase the effectiveness of central departments of a multinational with plants locatedin such diverse cultural realities and characteristics as countries like Tunisia, Portugal, Morocco, Romania, Germany, or in Asian and American continents, aggravated by geographical distance and time zones.

Methodology

The methodology adopted is the case study, in the context of BRICA's international projects and the participation of the BRICA Portugal staff to support these projects, in different countries, namely Romania, Morocco, Tunisia, Germany and Mexico, as well as statistical analysis of the BRICA Portugal employees' survey results. This methodology, according to Yin (2005), is an adequate empirical research to study a contemporary phenomenon in its real context.

In an attempt to understand the motivations, conditions and difficulties faced by employees who develop BRICA Portugal missions abroad, as well as how these aspects are manifested, in order to propose possible measures to improve the success chances of future missions, a survey of BRICA workers who had already been in missions abroad was carried out. The following broad research questions were asked:

Q1 - Regarding missions abroad, what kind of preparation is done and what is the level of employee satisfaction? What aspects should be improved?

Q2 - What is the level of employee satisfaction regarding the company's support during the mission and what do they feel are the greatest difficulties during missions abroad?

Q3 - What reasons lead employees to participate in missions abroad and which aspects are most valued later?

Q4 - What is the degree of difficulty of the Portuguese representative in communication and ease in working with colleagues from other countries where BRICA? Is the difficulty in communication and at work elated?

Q5 –Is the ease in communicating and working with colleagues from countries with greater cultural proximity greater?

BRICA

BRICA Portugal was founded on January 26, 1993, and manufactures wires and cables for the automotive industry. Production started in 1993, with about 50 employees, and currently it has more than 300. BRICA's group currently has over 1600 employees spread across five countries (Tunisia, Portugal, Morocco, Romania and Germany) in six manufacturing plants in operation. To this the research centre and sales representation in Germany should be added. Within the year the construction of a second factory in Romania and the first unit in Mexico should be completed, totalling then eight industrial plants.

General Description of the Sample

The sample considered for this study consists of the subset of BRICA Portugal employees that in the last five years went on missions abroad, lasting at least two consecutive weeks, in order to ensure some contact with the local culture in an informal context. Twenty employees,to whom the survey was directlydelivered,were identified with these characteristics.

Twenty employees were inquired and nineteen surveys were considered valid. These results were then subject to treatment. From the respondents, sixteen belong to the central departments of Projects, Quality, Engineering, Purchasing, Research and Development and Logistics, so their mission is to provide support to other plants, in the setup of new projects or in issues that may arise. In addition to the missions now studied, lasting more than two weeks, these collaborators developed several missions of shorter duration in the referenced countries and others. The remaining three employees belong to the BRICA Portugal maintenance team and occasionally participated in missions in other plants in the group.

Regarding the 19 surveys considered valid, 84.2% are male employees; 89.5% are married and 65% have qualifications at higher academic level, figures very close to the sample of the study Egea and Prieto (2005) made withSpanish companies' expatriates with offices overseas and companies with foreigners allocated in Spain, with 85% male participation and 66% in higher education. Ages were grouped into three sets: 30-39 years (57.9%), 40-49 years (36.8%) and older than 49 years (5.3%); 57.9% have already partakenin more than 10 weeks abroad and according to the information obtained at the BRICA Portugal Department of Human Resources, the average duration of the missions in the last 2 years was 3.5 weeks.

Regarding the missiongeographical distribution, 78.9% of respondents developed missions in Morocco, 52.6% in Romania, 26.3% in Tunisia and 10% in Germany.

Presentation and Analysis of Research Results

Data analysis was performed using the IBM SPSS statistical software (Statistical Package for Social Sciences), version 19.0 for Windows, and the Microsoft Excel software.

The chi-square independence test was used to test the independence between two variables, and when the respective conditions were not verified, we used the Monte Carlo Simulation. In all analyses, significancewas set at 0.05.

We present the answers to the research questions raised:

Q1 - Regarding missions abroad, what kind of preparation is done and what is the level of employee satisfaction? What aspects should be improved?

Black et al. (1991) reported that prior knowledge of the destination's culture, language, and social characteristics, as well as the right knowledge to perform the mission, contribute to the reduction of uncertainty and doubt, facilitating adjustment and reducing the associated stress and improving personal satisfaction. We intend to assess the satisfaction level of BRICA Portugal employees regarding mission preparation and to compare it with the available information on similar studies.

Of the respondents, 78.9% said they had no specific training regarding the culture, language or other characteristics of the destination country, while 21.1% answered affirmatively. In comparative terms, the study of Egea and Prieto (2005) reveals that 57% of staff receives basic information regarding the destination country, especially in the culture, customs and language areas. On the question of considering if the preparation was adequate, 78.9% said yes, while 21.1% answered no. In this respect, Vogel and Vuuren (2008), in an international study of 709 expatriates, reveal that 40% felt they were not adequately prepared for a mission abroad, which is about twice the percentage obtained in the BRICA Portugal survey.

About 73.7% of respondents sought to inform themselves in advance about the destination country via the Internet while 63.2% said they had resorted to colleagues and 10.6% to magazines.

As regards the aspects to improve in the preparation of future missions, 21.1% of the respondents said culture; 15.8% to 10.5% answered language and history of the destination country.

Based on the results of the question on the opinion of respondents on the proper preparation, it was hypothesized that their perception was dependent on the experience, i.e., the number of missions undertaken:

H_{01}: There is no significant relationship between the perception of mission preparation and the number of missions developed.

Table 1 shows that satisfaction with the mission preparation is lower among employees with the highest number of missions. The chi-square test shows a p-value = 0.001 <0.05 (Annex I - Table 1) confirming the existence of statistical evidence of professional experience and opinion about the mission preparation.

Table 1 - Contingency table: "Number of missions / Did you have adequate preparation for the mission abroad?".

			Did you have adequate preparation for the mission abroad?		
			Yes	No	Total
Number of missions	1	Count	7	0	7
		% within Number of missions	100.0%	.0%	100.0%
	2	Count	3	1	4
		% within Number of missions	75.0%	25.0%	100.0%
	3	Count	5	0	5
		% within Number of missions	100.0%	.0%	100.0%
	4	Count	0	3	3
		% within Number of missions	.0%	100.0%	100.0%
Total		Count	15	4	19
		% within Number of missions	78.9%	21.1%	100.0%

Q2 - What is the level of employee satisfaction regarding the support of the company during the mission and what do they feel were the greatest difficulties during missions abroad?

We also wanted to know the difficulties experienced by employees during trips as well as their perception regarding the assistance rendered by the company. Similarly we sought to determine whether the difficulties are felt evenly by employees with different levels of training experience or age.

Regarding the assistance rendered by the company during the mission, 68.4% considers it appropriate; 26.3% state that it could be better in terms of allowance and 5.3% state that it could be better in terms of coordinating with headquarters. Comparing with the data of the Vogel and Vuuren study (2008), which shows that about 56% of the expatriate personnel felt that the coordination with the headquarters was appropriate, we found that the values obtained in the BRICA Portugal survey are significantly superior, since only 5.6% said they felt that coordination could be better. It is suggested that the fact that the average period for BRICA Portugal mission is 3.5 weeks, which is significantly below the average of 12 months referred to in the literature (Voigt 2001; Ashamalla 1998) for the expatriation missions. This should contribute to the better sense of monitoring by the staff involved.

It is consequently important whether the opinion on mission support is associated with the academic level of the employee so we formulated the following hypothesis:

H02 - There is no significant relationship between the perception on the support provided by the company during the mission and the academic level of the employee.

In Table 2 it is seen that 41.7% of employees with average or higher education stated that the support could be better, while 85.7% of respondents with primary or secondary education said they felt satisfied regarding the assistance rendered during the journey. The chi-square test shows a p-value = 0.333> 0.05 (Annex I - Table 2), which means that there is no significant difference between the academic level of the employee and the perception on the support.

Table 2 - Contingency table: "Academic level/Do you consider that the company provided adequate support during the travel period?".

			Do you consider that the company provided adequate support during the travel period?		
			Yes	Yes, but it could be better	Total
Academic level	Basic or secondary	Count	6	1	7
		% within Academic level	85.7%	14.3%	100.0%
	Higher Education	Count	7	5	12
		% within Academic level	58.3%	41.7%	100.0%
Total		Count	13	6	19
		% within Academic level	68.4%	31.6%	100.0%

With regard to difficulties experienced by employees during missions, those related to family were indicated as the most important with an average rating of 2.6 on a scale of 1 to 3; followed by food difficulties, with an average difficulty of 1.8; language difficulties had a mean value of 1.6 and the health difficulties had a mean value of 1.4.

Family agreement and support, according to authors such as Schneider et al. (1996) and Lee (2007), are determining factors in the success of the expatriation mission or even in the person's decision regarding mobility. On the subject of language, Thorn (2009) noted that the opportunity of learning a new language can be a motivating factor. Black and Stephens (1989) refer to food as an important factor adjustment, as well as health conditions, particularly for expatriates accompanied by children.

With regard to financial compensation, employees feel satisfaction when compensation is in line with their expectations, creating a sense of commitment to the company, with a positive impact on the motivation to achieve positive results (Tornikoski 2011).

Data from BRICA Portugal identify family problems as the most important coinciding with the studies of Schneider et al. (1996). In order to know if family problems manifest themselves equally to employees of different ages, it is hypothesized:

H_{03} - There is no significant relationship between family problems and the age of the employee.

Table 3 emphasizes that 72.7% of respondents aged between 30 and 39 years have felt many family difficulties during the missions abroad, and only one of the respondents aged over 49, has assumed moderate family difficulties. The chi-square test showed a p-value = 0.436> 0.05 (Annex I - Table 3) which means that the variables are independent so there is no statistical evidence to indicate a relationship between the age of the employee and family difficulties.

Table 3 - Contingency table: "Age/family problemsis one of the biggest difficulties felt when you are absent from the home country several consecutive weeks.".

			Family problems is one of the biggest difficulties felt when you are absent from the home country several consecutive weeks		
			2 – moderate difficulty	3 – great difficulty	Total
Age	30 to 39	Count	3	8	11
		% within Age	27.3%	72.7%	100.0%
	40 to 49	Count	3	4	7

		% within Age	42.9%	57.1%	100.0%
	>49	Count	1	0	1
		% within Age	100.0%	.0%	100.0%
Total		Count	7	12	19
		% within Age	36.8%	63.2%	100.0%

With regard to language problems, it is important to know whether they are related to the academic level, so we hypothesized:

H_{04}- There is no significant relationship between language problems and the academic level of the employee.

In Table 4 we can see that from respondents with university degrees, just 80% assign some importance to language difficulties experienced when travelling abroad, while respondents with lower academic level report more difficulties. The chi-square test shows a p-value = 0.025 <0.05 (Annex I - Table 4), which means that there is a statistically significant difference between the educational level of employees and the language difficulty level when on missions abroad. A greater difficulty in employees with low academic level is obviously more prominent.

Table 4 - Contingency table:"Academic level/language is one of the greatest difficultieswhen you are absent from the home country several consecutive weeks.".

			Language is one of the greatest difficulties when you are absent from the home country several consecutive weeks.			Total
			1 – some importance	2 – moderate importance	3 – high importance	
Academic level	Basic or secondary	Count	1	3	2	6
		% within Academic level	16.7%	50.0%	33.3%	100.0%
	Higher Education	Count	8	2	0	10
		% within Academic level	80.0%	20.0%	.0%	100.0%
Total		Count	9	5	2	16
		% within Academic level	56.3%	31.3%	12.5%	100.0%

In relation to misunderstanding problems with individuals from other nationalities, 89.5% said they did not feel it, while 10.5% said they had experienced these situations. As for the problems in returning after the missions abroad, only 5.3% mentioned them, without specifying its type.

Q3 - Which reasons lead employees to participate in missions abroad and which aspects are most valued later?

Warneke and Schneider (2011), based on their study of Spanish and German expatriates, suggest economic rewards, ensuring reintegration and supporting the spouse and children as the most important factors in the decision to accept a mission abroad. Egea and Prieto (2005) suggest the learning gained from the expatriation experience is a major reason for accepting a mission abroad.

BRICA employee respondents rated grounds for missions abroad, on a 1-3 scale: professional challenge with an average of 2.74; part of the job description with 1.94; economic advantages with 1.47,and getting to know new cultures with 1.36.

These results of the BRICA Portugal survey do not match the Schneider and Warneke studies (2011) with regard to economic benefits, since they were ranked third, although one cannot ignore that 26.3% has said that the economic support could be better. Of the various reasons given, the professional challenge was rated as the most important reason, with a mean value of 2.74, which seems to confirm the studies of Egea and Prieto (2005).

On the more valued aspects after the mission abroad, the experience and professional development stood out, with an average score of 2.9 (scale 1-3), coming in contact with new cultures and places second, with an average rating of 1.7; and thirdly, the economic advantages, classified with an average of 1.6.

The hypothesis was placed on the possibility of valuing professional experience varying with the employee's age:

H05 - There is no significant relationship between the enhancement of professional experience and age of the employee.

Analysis to Table 5 shows that 89.5% of respondents, regardless of age, consider of high importancethe experience and professional valuation obtained during missions abroad. The chi-square test shows a p-value = 0.539> 0.05 (Annex I - Table 5), which means that the variables are independent, i.e., there is no statistical evidence of a relationship between the employee'sage and the enhancement of professional experience gained in carrying out missions abroad.

Table 5 - Contingency table: "Age /experience and professional development were some of the most valued reasons in the professional experience abroad.".

			Experience and professional development were some of the most valued reasons in the professional experience abroad.		Total
			2 – moderate importance	3 – high importance	
Age	30 to 39	Count	2	9	11
		% within Age	18.2%	81.8%	100.0%
	40 to 49	Count	0	7	7
		% within Age	.0%	100.0%	100.0%
	>49	Count	0	1	1
		% within Age	.0%	100.0%	100.0%
Total		Count	2	17	19
		% within Age	10.5%	89.5%	100.0%

Q4 - What is the difficulty degree of the Portuguese representative in communication and working ease with colleagues from other countries where BRICA is also located? Are difficulties in communication and work related?

Measuring a Portuguese's communication difficulties with individuals from other countries was done on a 1-3 scale (1-little difficulty, moderate difficulty-2, 3-very difficult). It appears from Table 6 that it is with Moroccan colleagues that, on average, the greatest difficulties in communication occur.

Table 6 –Portuguese representative's average difficulty degree in communicating and working with colleagues from the remaining countries.

Portuguese with:	**Portuguese**	**Romanians**	**Tunisians**	**Moroccans**	**Germans**
Difficulty degree in communicating (1 a 3)	1.0	1.3	1.6	2.1	1.6
Ease at work (1 a 3)	2.9	2.4	1.7	1.3	2.2

Ease at work with individuals from other countries was rated 1-3 (1-harder, 2-fair, 3-easier). We found that, on average, it was with the Tunisian and Moroccan colleagues that the BRICA Portugal employees felt more difficulties in working.

Analysis of Table 6 confirms Romania, in relative terms, as the country, after Portugal, which has evidenced greater ease in working and less difficulty in communicating, validating Hofstede's (2013) indications. However, for Germany and Morocco, it appears that a significant greater cultural distance from Germany (uniformly valuing Hofstede's cultural dimensions) corresponds, as compared to Morocco, to a greater ease in working and less difficulty in communication.

Figure 1 shows the difficulty in communicating by country, related to academic level, where one can see that, in the countries under review, with the exception of Morocco, communication difficulties are lower for employees with Higher Academic levels. The reason for this is that they usually have higher language skills and relate mainly to interlocutors with majors atthe similar level.

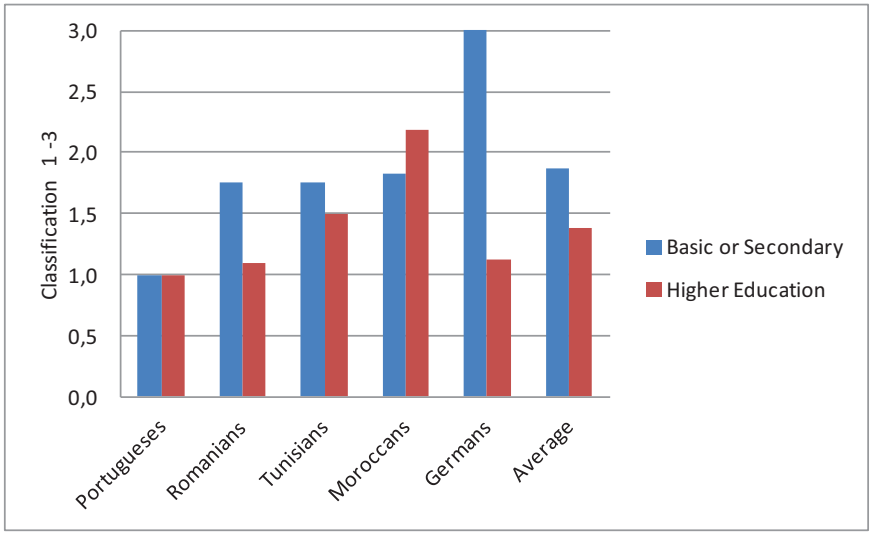

Figure 1 - Difficulty in communicating with individuals of the country/academic level.

Other working hypotheses were tested to know the communication difficulties with colleagues from other countries and the academic level:

H06 - There is no significant relationship between communication difficulty with colleagues from other countries and academic level.

It is observed in Table 7 that 25% of respondents with a basic or secondary academic level report great difficulty in communicating with Romanian colleagues. However, the chi-square test shows a p-value = 0.154> 0.05, (Annex I - Table 6), i.e., there are no significant differences between the academic level of Portuguese employees and the degree of difficulty in communicating with Romanians.

Table 7 - Contingency table: "Academic level/how do you rate the difficulty degree in communicating with **Romanian** colleagues or technical suppliers, who participated in projects abroad?".

			How do you rate the difficulty degree in communicating with **Romanians** colleagues or technical suppliers, who participated in projects abroad?			
			1 – a little difficult	2 – moderately difficult	3 – very difficult	Total
Academic level	Basic or secondary	Count	2	1	1	4
		% within Academic level	50.0%	25.0%	25.0%	100.0%
	Higher Education	Count	10	1	0	11
		% within Academic level	90.9%	9.1%	.0%	100.0%
Total		Count	12	2	1	15
		% within Academic level	80.0%	13.3%	6.7%	100.0%

The results in Table 8 support the conclusion that 50% of respondents with a Higher Education degree report some difficulty in communicating with fellow Tunisians. The chi-square test shows a p-value = 0.328> 0.05 (Annex I - Table 7), which means that there are no statistically significant differences between the academic level of Portuguese employees and the degree of difficulty in communicating with the Tunisian.

Table 8- Contingency table: "Academic level/how do you rate the difficulty degree in communicating with **Tunisian** colleagues or technical suppliers, who participated in projects abroad?".

			How do you rate the difficulty degree in communicating with **Tunisian** colleagues or technical suppliers, who participated in projects abroad?			
			1 – a little difficult	2 – moderately difficult	3 – very difficult	Total
Academic level	Basic or secondary	Count	2	1	1	4
		% within Academic level	50.0%	25.0%	25.0%	100.0%
	Higher Education	Count	5	5	0	10
		% within Academic level	50.0%	50.0%	.0%	100.0%
Total		Count	7	6	1	14
		% within Academic level	50.0%	42.9%	7.1%	100.0%

We can see in Table 9 that 36.4% of the respondents with Higher Education academic level mention many difficulties in working with Moroccan colleagues. However, the chi-square test shows a p-value = 0.686> 0.05, (Annex I - Table 8) which means that there are no significant differences between the academic level of Portuguese employees and the degree of difficulty in communicating with Moroccans.

Table 9- Contingency table:"Academic level/how do you rate the difficulty degree in communicating with **Moroccan**colleagues or technical suppliers, who participated in projects abroad?".

			How do you rate the difficulty degree in communicating with **Moroccan** colleagues or technical suppliers, who participated in projects abroad?			
			1 – a little difficult	2 – moderately difficult	3 – very difficult	Total
Academic level	Basic or secondary	Count	2	3	1	6
		% within academic level	33.3%	50.0%	16.7%	100.0%
	Higher Education	Count	2	5	4	11
		% within academic level	18.2%	45.5%	36.4%	100.0%
Total		Count	4	8	5	17
		% within academic level	23.5%	47.1%	29.4%	100.0%

In Table 10, 100% of respondents with basic or secondary academic level consider very difficult to communicate with the Germans, unlike the colleagues with Higher Education level, where 87.5% report little difficulty. The chi-square test shows a p-value = 0.006 <0.05 (Annex I - Table 9) so that there is statistical evidence of a relationship between the level of education of the employee and the degree of difficulty in communicating with the Germans.

Table 10 - Contingency table:"Academic level/how do you rate the difficulty degree in communicating with **German**colleagues or technical suppliers, who participated in projects abroad?".

			How do you rate the difficulty degree in communicating with **German** colleagues or technical suppliers, who participated in projects abroad?			
			1 – a little difficult	2 – moderately difficult	3 – very difficult	Total
Academic level	Basic or secondary	Count	0	0	3	3
		% within Academic level	.0%	.0%	100.0%	100.0%
	Higher Education	Count	7	1	0	8
		% within Academic level	87.5%	12.5%	.0%	100.0%
Total		Count	7	1	3	11
		% within Academic level	63.6%	9.1%	27.3%	100.0%

One possible explanation for the different results for Germany, where the BRICA Portugal employees with Higher Education degrees reveal a significantly lower communication difficulty may be that these relate mainly to Germans also possessing academic training at Higher Education, blurring the cultural differences. This explanation may also be supported by the fact that the sample of employees who responded to this question, there are significantly more individuals with Higher Education level (8) than with basic or secondary level (3). Another possible explanation may involve the existence of a common "industrial culture" (Rowlinson et al., 1993), which facilitates the communication regardless of national cultural differences.
However, despite the relative difficulty communicating with the Germans, Germany was referred to as the preferred country to work outside Portugal (Figure 2), confirming the results of the study by Richardson and Mallon (2005), pointing to the move to a country with higher standard of living as a motivating factor for expatriation.

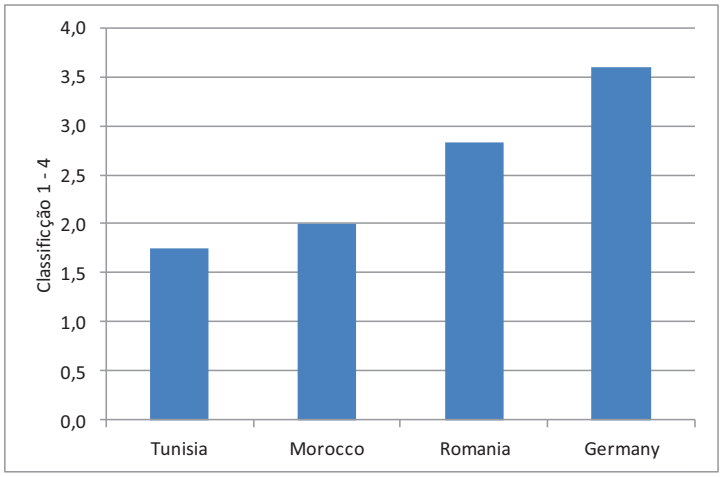

Figure 2 - Preferred Countries to work (outside Portugal).

The communication difficulty degree related to the presence in a given country is presented in Table 10. Broadly speaking, there are no statistically significant differences (all t-test values are less than 0.05, Annex I - Tables 10 - 13) between the assessments of the employees who developed BRICA Portugal missions for more than 2 weeks in a country abroad and the remaining employees who never been on missions in that country, but that have some contact with colleagues from this country. However, individuals who were in Germany show higher mean values for assessment of difficulty (0.44 on a scale 1-3), unlike what happens with Tunisia, where those who were there, have a lower perception, in average terms, of difficulty in communication.

Table 10 - Presence in the country/assessment of the communication degree.

Have you been on missions in the corresponding country?		How do you rate the difficulty degree in communicating with Romanian colleagues or technical suppliers, who participated in projects abroad?	How do you rate the difficulty degree in communicating with Tunisian colleagues or technical suppliers, who participated in projects abroad?	How do you rate the difficulty degree in communicating with Moroccan colleagues or technical suppliers, who participated in projects abroad?	How do you rate the difficulty degree in communicating with German colleagues or technical suppliers, who participated in projects abroad?
Yes	Mean	1.00	1.40	2.07	2.00
	N	8	5	15	2
	Std. Deviation	.000	.548	.799	1.414
No	Mean	1.00	1.67	2.00	1.56
	N	8	9	2	9
	Std. Deviation	.000	.707	.000	.882
Total	Mean	1.00	1.57	2.06	1.64
	N	16	14	17	11
	Std. Deviation	.000	.646	.748	.924

Q5 – Is the ease in communicating and working with colleagues from countries with greater cultural proximity higher?

According to Black *et al.* (1991), to the greatest cultural differences between two countries correspond more difficulties in adaptation and a need for a greater effort in the integration. For Thorn (2009), major cultural differences can cause major stress levels and possibly prevent mobility. In the present case, and as observed through Hofstede's dimensions (2013), Romania has the smallest cultural distance between the countries under discussion.

Recommendations

Backed by a literature search, the analysis of the survey results and its comparison with other studies, it is possible to advance some recommendations or suggestions that are relevant to the preparation and development of the BRICA Portugal employees' mission abroad.

- **Before the mission:**
  - **Training in the language of the destination country**. Language has been identified as one of the greatest difficulties encountered during missions abroad, particularly for employees with lower qualifications;
  - **Cultural and social framework of the destination country**. Especially pointing out aspects that can lead to misunderstandings with potentially disastrous consequences;
  - **Training in communication tools (Skype, Viber, etc).** Mainly for employees with lower qualifications, given that communication with colleagues, and especially contact with family, are particularly important in emotional stability.

In short, it seems pertinent to produce a leaflet which should include relevant aspects to be observed when carrying out missions abroad.

- **During the mission**:
  - Support systems for the family of employees on assignment abroad, including:
    - **Extension of corporate health insurance to direct household,** for employees who spend a number of weeks abroad each year, as a way to convey greater certainty regarding family health conditions;
    - **Providing technical support for the home and bureaucratic difficulties or legal problems,** taking advantage of the company facilities, given that the respondents considered that problems with family like that bothered them during the period of absence abroad.
  - Creation of a specific function in the central HR department, with a view to:
    - Coordinate personnel in transit;
    - Maintain frequent contact with personnel abroad;
    - Optimize travel;
    - Aggregate and disseminate relevant information;
    - Timely planning repatriation;
    - Assist in emergency situations.

In short, aspects that promote early adjustment, as previous training in the language or cultural aspects of the destination country, or facilitate adjustment during the stay, such as communication or emotional and family stability, may prove to be decisive factors in the success of the BRICA Portugal employees in future missions abroad.

Conclusions

The possibility to actively participate in an international project (Takeuchi *et al*., 2005) is a great opportunity to acquire or extend a range of skills and valuable experience, both professionally and personally. Probably the crucial conclusion about different cultures is the fact that, in most situations, there is nothing absolutely right or wrong, but only relatively so - there are aspects that may be right or wrong on the basis of the respective cultural frameworks (James, 2008).

It is not easy to shape human personality. However, you can create the right conditions so that human resources organizations, albeit with very different cultures and experiences, can leverage its capabilities and its efforts to converge towards a common goal. For that to happen it is necessary to adapt management practices to the existing cultures, constituting thus the creation of an environment of cultural respect the essential feature for the success of an international project involving individuals from different cultures.

An international project manager must be aware of the cultural aspects as well as the interactions that can benefit or harm the project, starting with the composition of the team. He should be able to select and integrate the necessary aspects through elements that add competence, but combined with the necessary "cultural tolerance", so that the team works. Demonstrating interest and openness to learn about different cultures and not try to imitate them is, according to Green et al. (2010), the essence of the global behaviour.

As far as the BRICA Portugal employees involved in missions abroad are concerned, the analysis of the survey did not confirm all the hypotheses. However, it confirmed a professional interest and not an economic one (though the latter was also clearly present), as the main reason for participating in these missions. It also confirmed that family-related problems are the most important, which reinforces the need for companies to pay more attention to this factor and to seek better ways to minimize it.

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Annex I

Table 1

Chi-Square Tests [d]

	Value	df	Asymp. Sig. (2 -sided)	Exact Sig. (2 -sided)	Exact Sig. (1 -sided)	Point Probability
Pearson Chi -Square	1.534 [a]	1	.216	.333	.238	
Continuity Correction [b]	.529	1	.467			
Likelihood Ratio	1.657	1	.198	.333	.238	
Fisher's Exact Test				.333	.238	
Linear-by-Linear Association	1.453 [c]	1	.228	.333	.238	.204
N of Valid Cases	19					

a. 3 cells (75.0%) have expected count less than 5. The minimum expected count is 2.21. .

b. Computed only for a 2x2 table

c. The standardized statistic is 1.206.

d. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results.

Table 2

Chi-Square Tests

				Monte Carlo Sig. (2 -sided)			Monte Carlo Sig. (1 -sided)		
					99% Confidence Interval			99% Confidence Interval	
	Value	df	Asymp. Sig. (2 -sided)	Sig.	Lower Bound	Upper Bound	Sig.	Lower Bound	Upper Bound
Pearson Chi -Square	14.488 [a]	3	.002	.001 [b]	.000	.002			
Likelihood Ratio	15.058	3	.002	.001 [b]	.000	.002			
Fisher's Exact Test	10.527			.001 [b]	.000	.002			
Linear-by-Linear Association	6.548 [c]	1	.010	.010 [b]	.007	.012	.010 [b]	.007	.012
N of Valid Cases	19								

a. 7 cells (87.5%) have expected count less than 5. The minimum expected count is .63.

b. Based on 10000 sampled tables with starting seed 1575976823.

c. The standardized statistic is 2.559.

Table 3

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Monte Carlo Sig. (2-sided)			Monte Carlo Sig. (1-sided)		
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	2.256[a]	2	.324	.436[b]	.423	.449			
Likelihood Ratio	2.557	2	.279	.436[b]	.423	.449			
Fisher's Exact Test	2.173			.436[b]	.423	.449			
Linear-by-Linear Association	1.714[c]	1	.190	.255[b]	.244	.267	.187[b]	.177	.197
N of Valid Cases	19								

a. 5 cells (83.3%) have expected count less than 5. The minimum expected count is .37.

b. Based on 10000 sampled tables with starting seed 2094576266.

c. The standardized statistic is -1.309.

Table 4

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Monte Carlo Sig. (2-sided)			Monte Carlo Sig. (1-sided)		
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	7.087[a]	2	.029	.025[b]	.021	.029			
Likelihood Ratio	8.161	2	.017	.040[b]	.035	.045			
Fisher's Exact Test	6.475			.036[b]	.031	.041			
Linear-by-Linear Association	6.622[c]	1	.010	.013[b]	.010	.015	.013[b]	.010	.015
N of Valid Cases	16								

a. 5 cells (83.3%) have expected count less than 5. The minimum expected count is .75.

b. Based on 10000 sampled tables with starting seed 705346993.

c. The standardized statistic is -2.573.

Table 5

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Monte Carlo Sig. (2-sided)			Monte Carlo Sig. (1-sided)		
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	1.626[a]	2	.444	.539[b]	.526	.552			
Likelihood Ratio	2.356	2	.308	.539[b]	.526	.552			
Fisher's Exact Test	1.919			.539[b]	.526	.552			
Linear-by-Linear Association	1.340[c]	1	.247	.553[b]	.540	.566	.321[b]	.309	.333
N of Valid Cases	19								

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .11.

b. Based on 10000 sampled tables with starting seed 2094576266.

c. The standardized statistic is 1.158.

Table 6

Likelihood Ratio	3.811	2	.149	.316[b]	.304	.328			
Fisher's Exact Test	3.790			.154[b]	.144	.163			
Linear-by-Linear Association	3.616[c]	1	.057	.104[b]	.096	.112	.104[b]	.096	.112
N of Valid Cases	15								

a. 5 cells (83.3%) have expected count less than 5. The minimum expected count is .27.

b. Based on 10000 sampled tables with starting seed 705346993.

c. The standardized statistic is -1.902.

Table 7

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Monte Carlo Sig. (2-sided)			Monte Carlo Sig. (1-sided)		
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	2.917[a]	2	.233	.328[b]	.316	.340			
Likelihood Ratio	2.969	2	.227	.328[b]	.316	.340			
Fisher's Exact Test	2.549			.328[b]	.316	.340			
Linear-by-Linear Association	.428[c]	1	.513	.647[b]	.634	.659	.398[b]	.386	.411
N of Valid Cases	14								

a. 5 cells (83.3%) have expected count less than 5. The minimum expected count is .29.

b. Based on 10000 sampled tables with starting seed 705346993.

c. The standardized statistic is.654.

Table 8

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Monte Carlo Sig. (2-sided)			Monte Carlo Sig. (1-sided)		
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	.908[a]	2	.635	.686[b]	.674	.698			
Likelihood Ratio	.940	2	.625	.686[b]	.674	.698			
Fisher's Exact Test	1.030			.820[b]	.810	.830			
Linear-by-Linear Association	.844[c]	1	.358	.504[b]	.491	.517	.282[b]	.270	.293
N of Valid Cases	17								

a. 5 cells (83.3%) have expected count less than 5. The minimum expected count is 1.41

b. Based on 10000 sampled tables with starting seed 705346993.

c. The standardized statistic is .919.

Table 9

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Monte Carlo Sig. (2 -sided)			Monte Carlo Sig. (1 -sided)		
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi -Square	11.000 [a]	2	.004	.006 [b]	.004	.008			
Likelihood Ratio	12.891	2	.002	.006 [b]	.004	.008			
Fisher's Exact Test	9.125			.006 [b]	.004	.008			
Linear -by-Linear Association	8.976 [c]	1	.003	.006 [b]	.004	.008	.006 [b]	.004	.008
N of Valid Cases	11								

a. 5 cells (83.3%) have expected count less than 5. The minimum expected count is .27.

b. Based on 10000 sampled tables with starting seed 705346993.

c. The standardize d statistic is -2.996.

Table 10

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
How do you rate the difficulty degree in communicating with Tunisians colleagues or technical suppliers, who participated in projects abroad?	Equal variances assumed	.551	.472	-.726	12	.482	-.26667	.36717	-1.06666	.53333
	Equal variances not assumed			-.784	10.38	.450	-.26667	.33993	-1.02030	.48697

Table11

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	*95% Confidence Interval of the Difference*	
									Lower	Upper
How do you rate the difficulty degree in communicating with Romanians colleagues or technical suppliers, who participated in projects abroad?	Equal variances assumed	2.568	.133	-.601	13	.558	-.20000	.33282	-.91901	.51901
	Equal variances not assumed			-.474	4,911	.656	-.20000	.42164	-1.28977	.88977

Table 12

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
How do you rate the difficulty degree in communicating wirh Moroccans colleagues or technical suppliers, who participated in projects abroad?	Equal variances assumed	3.279	.090	.115	15	.910	.067	.581	-1.172	1.305
	Equal variances not assumed			.323	14.000	.751	.067	.206	-.376	.509

Table 13

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
How do you rate the difficult degree in communicating with Germans colleagues or technical suppliers, who participated in Projects abroad?	Equal variances assumed	.771	.403	.595	9	.567	.444	.747	-1.246	2.135
	Equal variances not assumed			.426	1.179	.735	.444	1.042	-8.874	9.763