

UNIVERSIDADE FEDERAL DE ITAJUBÁ
PROGRAMA DE PÓS GRADUAÇÃO EM ENGENHARIA DE PRODUÇÃO

JUSTIN MICHAEL HANSEN

**IDENTIFYING CONSEQUENCES OF CULTURAL INFLUENCE IN
INTERNATIONAL RESEARCH PROJECTS BY BRAZILIAN PROFESSORS IN
THE UNITED STATES**

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Dissertação entregue como requisito do Programa de Engenharia de Produção da Universidade Federal de Itajubá para obtenção do título de mestre.

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RESUMO

Identificar e avaliar a influência de fatores culturais em pesquisas desenvolvidas por meio de projetos internacionais é um tópico que está se tornando cada vez mais relevante à medida que o mundo continua a se globalizar. Valores culturais que diferem em todo o mundo influenciam a vida cotidiana muito mais do que muitas pessoas normalmente percebem. A contribuição científica deste trabalho está alinhada com outras publicações encontradas na área de gestão de projetos internacionais que abordam fatores culturais. Seu objetivo é identificar os fatores culturais e analisar sua influência no desenvolvimento de projetos de pesquisa internacionais. Tem como objeto de estudo onze professores, que realizaram projetos de pesquisas nos Estados Unidos. Como resultado se espera implementar medidas que preparem melhor os indivíduos para o desenvolvimento de seus projetos de pesquisas no exterior potencializando maximizar sua produtividade. O país mais comum estudado no contexto do desenvolvimento de projetos interculturais é a China. Foram identificados como fatores: total work and space (work orientation; participation in decisions; interaction with team); adapation (safety; laws and rules; politics / bureaucracy; religion; climate; distance from family); adaptation (social life; alimentation; communication); total work and space (development of new skills; workload; reception by team). Os fatores foram avaliados, pelos entrevistados, por meio de perguntas abertas e fechadas. Os resultados, condizentes com boa parte da literatura consultada, demonstraram que os fatores de maior importância para os brasileiros que desenvolveram projetos de pesquisa nos EUA são: a comunicação, o conforto no dia a dia, a vida social, e a autonomia no trabalho.

Palavras-chaves: influências culturais, mercado global, projetos de pesquisa internacionais

ABSTRACT

Identifying and assessing the influence of cultural factors in international research and projects is a topic that is becoming increasingly relevant as the world continues to globalize. Cultural values that differ across the world have a deeper influence on everyday life than many people are normally aware of. The scientific contribution of this work will be in line with other publications found in the area of management of international cultural projects with a specific aim of what steps can be taken in order to better prepare individuals working overseas and maximize their productivity. The most common country studied in the context of intercultural project development is China. However, the present research aims to establish and develop this knowledge in the context of Brazilian professors doing research in the United States through means of a survey taken by eleven Brazilian professors answering both open-ended and closed questions with a numeric rubric about their experiences in the US. The results of this project measured cultural factors related to personal life and everyday working issues in order to gain a better understanding of what cultural aspects are having the greatest influence on Brazilian professors conducting research in the US. The data, consistent with much of the literature consulted for this project, demonstrated that among other areas, communication, comfort in one's everyday working and social life, and autonomy in the workplace were considered to be of the most importance areas for Brazilians living in the US.

Keywords: cultural influences, global market, international research projects

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CHAPTER 1: INTRODUCTION

1.1 – RESEARCH CONTEXT AND OBJECTIVES

Identifying and assessing the influence of cultural factors in international research and projects is a topic that is becoming increasingly relevant as the world continues to globalize. Cultural values that differ across the world have a deeper influence on everyday life than many people may understand. In a world where everyday life affects and is affected by these qualities, research that develops a focus on how these differences can be used to raise awareness around the world and help people everywhere to work in a way that is respectful to their host country. This research focuses specifically on the cultural factors experienced by Brazilian professors who have conducted research in the United States.

International culture is having an impact on those involved in international working and living situations all over the world in an array of global markets. This has been identified and can easily be seen through the existing literature (SHORE, 2005). Research on this topic can be identified in the publications of Watanuki *et al.* (2014), who performed a bibliometric study on the management of international projects. The authors concluded that research on the theoretical bases refers to investigations of cultural and behavioral differences between individuals. They complement this by saying that the difficulties are in the communicative barriers, of knowledge sharing and of decision making.

The research developed on this subject analyzes international projects under various aspects. For example, Waal and Boer (2018) developed their research on the relationship between culture of the country and the control mechanisms used in the projects, analyzing projects from companies developed in Austria, Finland, India and Russia. Wang, Dongdong and Pretorius (2016) studied the behavior of project managers of different cultures in conflict resolution, having as an object of study managers from Chinese and South African projects. Moreover, Amster and Böhm (2016) investigated behavioral cultural differences between Indian project managers as well as their counterparts in other countries.

In the academic world, international student mobility is the most widespread internationalization strategy among higher education institutions that have increasingly applied financial resources to study abroad programs (RAMOS, 2017). This international mobility often occurs through the development of research projects, lasting from three months to one year.

It has been verified that the theme "international projects" has been approached from various perspectives. In this sense, this dissertation aims to contribute to the international research projects developed by professors through postdoctoral studies.

For Coraiola *et al.* (2011), the postdoctoral process is one of complementation through training, of interaction between universities aiming at a notion of inter-organizational complementarity, and of establishment of network relationships. This modality of scientific projects, supported by the development agencies beyond the expectation of learning, promote moments of international insertion that are conducive to the coexistence of foreign culture through the institutional environment of research in the destination country. This results in the establishment of lasting scientific interactions and can provide the exchange and transfer of knowledge, even after the return to the person's place of origin (LOMBAS, 2017). The researcher identified that the number of men far exceeds that of women by around four times more in the three areas analyzed. This fact is also observed by Fernandez-Zubieta *et al.* (2013), which concluded that gender is an important intervening factor in the propensity to mobility, mainly due to the already assumed family obligations.

In engineering, there is a preponderance of the development of international research projects in the United States, which may be motivated by the superiority of the American institutions in the development of knowledge (RAMOS, 2017).

In this context, this research aims to identify cultural factors and analyze their influence in the development of international research projects.

The scientific contribution of this study will be in line with other publications found in the area related to management of international projects and the effects on them that culture is having. The most common country studied in the context of intercultural project development is China. However, other articles include countries from all regions around the world. In the same way that these articles contributed to the knowledge of the identification of cultural factors in the context of these countries, so too does the present research aim to establish and develop this knowledge in the context of the United States and Brazil. Thus, the justification of this project lies in the continuation of previous research and case studies done in other countries and cultural interactions. While developing general research on the global context of cultural exchange in projects, it will also seek a specified context that illuminates the specific interactions of Brazilian research projects in the United States.

Still, the relevance of this research is directly related to the ever-growing global market and continuous exchange among the peoples of different nations participating in international projects. The extent to which the world continues to emerge as a unitary, global economy that functions as a huge and complex entity ultimately furthers the research in the field of examining intercultural influence and exchange in the workplace. The geographical distribution of diverse peoples of all nations and cultures continues to push forward as the world continues to experience ever-increasing peaks of international diversity on all continents. Literature citing the connections between the performance of international workers and economic outcomes is becoming more abundant and is likewise the main source from which this study derives its theoretical orientation.

Thus, the intensity and the difficulties in the field of international management are becoming increasingly complicated. High-risk management is especially of interest in this case as culture can affect risk perception. Risk management has grown especially to be a very involved process nowadays with the influence of various stakeholders and workers in the context of international projects. As became apparent through the literature review, this in part has a lot to do with the fact that different cultures see potential risks in different ways and, in many cases, have different approaches to reduce or eliminate those risks. Sometimes sensitive cultural situations even become a necessary component to consider in solving risky operations.

It is then the intention of this research not to determine what each culture contributes to the international project management front or how much influence a given culture has, but rather identify the areas of the international projects that are influenced by various aspects of culture. The focus in this case is to find out how international research done by Brazilians in the United States is being influenced, and in what ways and to what degree. Of course having an idea of what certain national identities value and comparing them to others can give one good insight on potential outcomes of how management is going to be influenced. Therefore, the research aims of this project are essentially to: first, identify what the cultural factors that had an impact on the Brazilian professors interviewed are and secondly, evaluate these factors. In addition to this, it is also important to discuss what measures can be taken in the future in order to better prepare Brazilian professors that take on the same international research opportunities so that they may maximize these opportunities to better serve themselves and the academic community along with society at large.

1.2 – RESEARCH METHODOLOGY AND DELIMITATIONS

Based on the objectives of this study, the theoretical basis was developed mainly through a bibliometric analysis of cultural themes with an emphasis on the development of international research projects under aspects of the United States and Brazil.

The research method employed was a case study where UNIFEI was the object of study. This was due to the access to data and the current actions of the Rectory for the development of internationalization. The techniques of data collection used were: questionnaires, documentary analysis and direct observation, which will be explained in further detail in Chapter 3.

Due to the research method being a case study, the conclusions cannot be generalized, though they allow theories to be developed in order to explain the influence of cultural factors in the development of international research projects.

The interviewees were chosen from an official list, maintained by UNIFEI, of professors that have participated in overseas research in the United States. Of these professors, the ones that responded to the interview agreeing to participate in the study were evaluated and included as the participants of this study.

Considering the relationship between factors that influence the development of research and work outside the country of origin (housing, social interaction, leadership, individualism, *etc.*), this research can be characterized as descriptive, but with exploratory characteristics, since it contributes to the expansion knowledge about a little investigated scientific phenomenon.

1.3 – STRUCTURE OF RESEARCH

This research is divided into five chapters. Chapter 1 contextualizes the research topic by presenting the justification of the dissertation, its objectives, the methodology used and the delimitations of the project.

Chapter 2 describes the theoretical foundation and approach toward culture, especially in terms of its influence on the development of international research projects.

Chapter 3 highlights the materials and methods used to carry out the study.

In Chapter 4, the case study is shown along with the presentation and analysis of the data.

Chapter 5 presents Conclusions and Suggestions for Future Work. Finally, it is complemented with the Appendices, References and Annexes of the work.

CHAPTER 2: LITERATURE REVIEW

2.1 - DEFINING CULTURE

Culture is a difficult term to define as there are many existing ideas of what exactly this word means. This paper will first take into consideration several well-recognized definitions of the word before developing its own clear idea of how exactly culture is to be used in the context of this research. In fact, this very dilemma has been discussed in other literature reviews of similar studies done. Here is one such example:

There is no one single definition which encapsulates the term 'culture' wholly. It has been referred to as shared values, expectations and norms found within countries, regions, social groups, business norms and even departments and work groups within a norm. Culture is also that complex whole which includes knowledge, beliefs, arts, morals, customs and any other capabilities and habits acquired by man as a member of society. It is a distinctive way of life of a group of people which forms their complete design for living. It comprises "the behavioural norms that a group of people, at a certain time and place, have agreed upon to survive and co-exist". Cross-cultural management then refers to the control and organisation of two or more cultures. The involvement of frequently large organisations in construction outside their national boundaries, including the establishment of subsidiaries in other countries, is classified as 'international construction' (PHENG, 2000).

The article above does a particularly good job considering culture in various contexts such as countries, regions and social groups. These dynamics will be further considered and examined later in the data collection part of the project. What is most important to take from

this article in terms of application of the definition of culture in the context of this research is that culture is "a distinctive way of life of a group of people." Everything from beliefs, morals and norms that represent a group of people to the behavior and habits that form a "complete design for living" is recognized which is a major component of will be used as a framework of culture for this project. Perhaps it can be said that things such as beliefs, morals and accepted norms of a cultural group are what influence the behavior and habits of that group. That is to say that a groups' morals and beliefs shape what are accepted as the norms for these such people which then give way to the behaviors and habits as mere consequences of such a belief system. In this way of thinking, the current research seeks to identify how such cultural beliefs, morals and, likewise, norms produce behavioral and habitual routines and actions that in turn affect work output.

Furthermore, this study will examine how research is affected by the consequence of different behaviors and routines influenced by different beliefs intertwine and how they influence the overall outcome of productivity and research achieved. In an article from Pheng and Leong (2000), the authors recognize a more specific identification of culture, which is national culture. According to the authors, national culture is absorbed by people beginning at a very young age.

National culture is learnt very early in life when the individual is still unaware of its influence. Organisational culture, on the other hand, is acquired much later in life at a conscious level. Hence, it can be deduced that national culture is more deeply entrenched in the individual than organisational culture. (PHENG AND LEONG, 2000).

In establishing a connection to the previously examined definitions, it can be noted that all such characteristics that contribute to what culture is, *i.e.* attitude, beliefs, norms, routines, habits, *etc.*, are all at the very least, perceived and interpreted by people from a very early point in their life. National culture is specifically of importance to this paper as the focus is on the exchange of two national cultures, that of Brazil and that of the United States. This citation is

especially relevant as the mention of being more "entrenched in the individual that organizational culture" is made. Being said to be a very individualist country, the United States may have an impact in this aspect of Brazilian researchers working in the US. Brazil is also known to have a culture that is more community-based and family-based, so perhaps this factors into the results of this project considerably. Consistent with this definition is another article from Muriithi (2003), who further mentions the role of attitudes and values in determining cultural identity of a people.

The central theme of other organizational theorists, is that social-cultural factors play a potent role in determining the shared norms, values, attitudes and beliefs about work and organizations, among both managers and employees. Thus, what works in one context many not necessarily work in another. (MURIITHI, 2003)

Connecting this to the article from Pheng and Leong (2000), and the definition of culture offered, it can be added that attitudes and values also have an impact on shaping one's culture. Attitudes, as they develop in the mind, are seemingly more the base of aforementioned ideas. In connecting all of these ideas and definitions about what exactly culture is, one can examine it as another relationship of cause and effect. If norms are a consequence of beliefs and morals, then so too are beliefs and morals a result of attitude. Values, likewise could be considered as a result of one's attitudes influenced by their beliefs. More fundamental to all of this is knowledge. Knowledge, much like attitude, develops in the mind and brain and in turn affects the entire aforementioned cycle of values and beliefs, which then leads to routines and habits which are seemingly the output or product of developed attitudes and belief systems that are affected by knowledge and values.

Hofstede (1984), the ever famous and frequently cited author on the matter of international business and collective work projects overseas, gives light to categories of culture that are essential to understand in order to contextualize the current research. Giving special attention to a categorical way to classify both culture and its various components, Hofstede

demonstrates the differing levels of cultural influences and how they can be assessed as more individual qualities. One particular area of culture that has not been mentioned yet to which Hofstede contributes insight, is to the element of what he refers to as "Power distance" and the effect it has on the workplace, specifically regarding risk-taking and the avoidance of such a behavior. Uncertainty in the workplace is also relevant as it adds to prior discussion of potential communication in the workplace. Both of these ideas can be applied to relationships in project and research execution. These are not the only points of consideration that can be taken from the following citation from his work, however. Other key ideas include, and add to the previously discussed dichotomy between individualism and collectivism. Additionally, a comparison between masculinity and femininity is also highlighted.

Power distance: High power distance represents a high acceptance by less powerful individuals in society, of unequal distribution of power, and a willingness to regard the distribution as normal.

In work situations, high power distance is reflected in the positive evaluation of close supervision by both employees and managers. Organizational structures are 'taller', and middle and lower levels show an unwillingness to take decisions without reference to superiors. Open criticism is not common and employees rarely disagree with supervisors. Some writers (KIGGUNDU, 1989; BLUNT AND JONES, 1997) believe that many African cultures score high on power distance. Uncertainty avoidance is the extent to which ambiguity is perceived as threatening and risk-taking behavior is avoided. Within organizations, uncertainty avoidance is manifested in low risk taking, emotional resistance to change, more ritual behavior, a preference for clearly laid out rules, and managers who are heavily involved in detail. Kiggundu (1989) and Blunt and Jones

(1997) believe that African cultures score high on this dimension.

Masculinity/femininity is the extent to which masculine traits such as achievement, courage and competition are valued over feminine values and behavior such as nurturing and sympathy. In masculine cultures, masculine traits are valued more. Kiggundu (1989), and Blunt and Jones (1997) believe that African cultures exhibit medium masculinity.

Individualism/collectivism is the extent to which people define themselves as individual entities or in terms of groups (e.g. family, clan, etc.) as the primary source of work and solutions to their problems. African cultures are thus seen as collectivist, leaning heavily towards extended family ties, clans and ethnic groups (BLUNT AND JONES, 1997).

The first consideration that this article offers is that of "power distance," which is examined as a component of society that is viewed as the willingness of people to regard the unequal distribution of wealth as normal. In the example given, it can be seen that there are some situations where the power distance is great, and thus people at lower and middle level possessions do not feel empowered or at liberty to make decisions independently. This then leads to the state of uncertainty for many, which causes avoidance and results in a lack of communication that can prolong production requirements. Also mentioned is the characteristic of "risk-taking behavior" which he says is avoided in these cases of distance and power separation.

The article goes on to refer to "ritual behavior" where workers expect a clear set of rules and expectations laid out in front of them so to eliminate all possible confusion and to have clear expectations that rule out any type of risk-taking considerations. In such a situation, the higher-ups maintain a lot more control of projects and research execution. This relates back to the previous article that discusses individualism and collectivism and how people of collective

societies tend to depend on each other more than those of individual societies. Furthermore, individualism promotes independence to work and make decisions as one sees necessary and higher-ups will trust their employees or researchers to make more decisions and take more risks. The relationship between the cultures of Brazil and the United States could potentially have a similar outcome as the one in this example, given that the two countries differ greatly on the individualism versus collectivism spectrum. Also pertinent to this consideration is what is mentioned in the last paragraph when the comparison of individualism and collectivism is highlighted. In doing so, the article talks about how collective society members tend to rely on family members when they have problems with work or in relationships. This is important to consider as the combination of having confusion in the work place and no family members nearby while overseas could potentially have drastic effects on the researcher while abroad.

In the section about masculinity and femininity, the citation describes masculine traits that characterize a culture as valuing achievement, courage and competition. This particular aspect of comparison could result in interesting interaction within the context of Brazilians doing research in the United States. This is because although Brazil is regarded as a more "*machista*" society in some cases, the United States is a country that places high value on competition and achievement being that it is capitalist in its economic tendencies. Brazil, which is not necessarily considered as capitalist as the United States, is often regarded as more masculine in other aspects of its culture. However, it is important to recognize in this situation that these particular aspects of so-called "masculinity" tend to be favored and more highly valued in the United States than they are in Brazil.

Among other important aspects at the forefront of pertinence to this project are the economic differences between the two countries and how their economic attitudes and tendencies can effect productivity in the research sector. Muriithi (2003) brings light to this by laying out what he views as the tools and techniques of project management. Although this research will not look directly at management in the context of business projects, the literature here is very applicable to this study as the important components of project work and being international are still elements in common. The important concepts, tools and techniques to give special attention to include: project management processes, reward and recognition systems, time-cost-trade-off and procurement management processes.

Many of the concepts, tools and techniques of project management are based on economic rationality and analysis of means–end chains. For example:

- 1. The five key project management processes of initiating, planning, implementing, controlling and closing are based on the assumption that project managers are rational problem solvers, who apply a rational problem solving model to projects.*
- 2. Reward and recognition systems in current orthodoxy are based on organizational behavior theory built around Western values.*
- 3. The critical path method is based on a time-cost trade-off aimed at cost minimization.*
- 4. Procurement management processes assume arms-length transactions, and contract enforcement through Western models of contract/commercial law.*

When used in cultures whose values are not based on economic rationality—such as those in many African countries—the techniques may be inappropriate and result in project failure. The techniques are not faulty per se. Rather, the assumptions inherent in them about people—what motivates them, how they view or value work, how they relate to authority, what values or virtues they hold most dear—are not applicable in African cultures. (MURIITHI, 2003).

All four of the examples given as tools and techniques of project management are interesting to consider in the context of this project as they can certainly differ not only between the two countries being examined, but also on regional and even personal levels among the participants of both of these countries. Generally speaking, however, the United States is a place where, culturally, time-cost-trade-off is highly regarded and thus taken into consideration in

making any kind of project decisions. This can even apply to university research projects as they receive funding from the universities.

In the last paragraph, the author summarizes his point by making the point that "cultures whose values are not based on economic rationality" might be more prone to failure in regard to these techniques since the value is not seen in them. His last statement can also be applied to any exchange of cultures. The simple fact that certain values might not carry any meaning to someone from another country, and thus not have any positive impact as intended, could result in a decline of productivity.

The classification and categorization of cultural characteristics as established for the sake of this research will be organized into the following categories: Economics, Laws, Politics, Geography, Security, Infrastructure and Religion. This will be a basis by which cultural influences are identified and then further analyzed and evaluated for being positive, negative or neutral factors. The following brief citation shows insight as to why this structure of organization is effect and can better guide the research at hand.

Each country in which such organizations operate in can have a distinct economic, political, legal, cultural and competitive context which businesses must respond to positively (PHENG, 2000).

Here, Pheng shows how each of these specific aspects is an area to which businesses must respond positively. In other words, each of these areas deserves attention because it is an area that can have cultural impact on those working in other countries. It is this study's aim to further organize this list into which of these components lies more fundamental to others. For example, geography can be influential in its own respect in the areas of economy and religion. Another example is infrastructure which can have a direct effect on the economy along with security.

One final consideration regarding the point of defining culture for the sake of this research is that counterexamples tend to exist and they can be ever more prominent in countries like both Brazil and the United States due to their large populations comprised of numerous diverse cultures throughout many regions of each country. This is important to consider and

remember, especially in the analysis and evaluation of the results of this research as such a dynamic can make for seemingly inconsistent results or rather varied results that may prove hard to be measured or classified. Not only do counterexamples break the so-called norms of given cultural values, but also important is the consideration of how today's world is one of very mixed international cultures. Many families and individuals bring their home and native culture along with its values across the border with them when they migrate to another country. For this reason, identifying and labeling certain behaviors and associating them with a specific culture can become complicated.

2.2 - ASSESSING CULTURAL VALUES

Research, especially collaborative research, involves several factors on many levels but as will be seen in this study, this only becomes more complicated in the context of international research due to increasing influential factors at play. Specifically, the cultural aspects of international project management will be looked at in order to determine the role of culture and its influence on international projects. What can be seen through the work of this study and the articles cited is just how cultural impacts in the context of international projects become severely more complicated due to how deep cultural values run in certain parts of the world and determine how the people of those cultures conduct and manage projects. Thus international projects must deal with and overcome the mixing and often times clash of such cultural blending.

In the article below, the research displayed offers good insight on how, in cross-cultural communities and projects, trust is ultimately valued as it promotes information sharing. Therefore, trust seems to have a very strong influence on relationships in the international work setting which in turn affects productivity and work results in international project managements.

The findings reveal that both the processes and the culture are correlated with the level of understanding of project interdependencies, and that a project culture that is characterized by trust and promotes information sharing may have a particularly strong influence. The findings highlight that the tools and processes and the

project culture and environment are both important factors in an organization's understanding of project portfolio interdependencies. This finding supports other research that emphasizes the strong relationship of culture and environment with PPM outcomes, and cautions against focus on processes and tools in isolation (CHRISTIANSEN AND VARNES, 2008; COOPER ET AL., 2004; KLEINSCHMIDT ET AL., 2007).

Not only is trust deemed as a very important aspect in any culture and even more so in any cross-cultural or international situation, but this citation also shows how an understanding between people of different cultures is essential in promoting a successful outcome in any international project. Creating and developing an understanding between members of an international team or cross-cultural group is a fundamental component that lays the foundation for building and maintaining trust between such partners. Regardless of this, establishing an understanding between parties is essential for communication and interdependencies of a project. The previous quote highlights the importance of this and how it is the basis of a good working relationship for international partnerships.

2.3 - CULTURE IN INTERNATIONAL RESEARCH

The following quote offers helpful information about how in today's world, strategic global alliances are being made regularly in efforts to further continued international projects. In mentioning this, the following citation from the previously mentioned article indicates the importance of this research and highlights how the significance of cultural differences has a great impact on this aspect of partnership.

Driving the interest in national culture is the increase in strategic alliances across the globe. Businesses collaborate more closely with their global suppliers and governments collaborate more closely with other

governments on such science projects as space stations, alternative energy sources, and particle accelerators. As these alliances increase, the significance of cultural differences also increases (CROSS, B.J., SHORE, B. 2005).

This citation summarizes the importance of the continued research effort. Essentially, international culture is having an impact all over the world in various global markets. This has been pinpointed and can be very easily seen through the existing literature. The aim of this paper then, is to continue this research and look at the specific consequences that cultures are having on international projects, *i.e.* what is the role of international culture in the place of these projects? How is it affecting them and how can this be dealt with?

Appelt *et al.* (2015) discuss the contributions of mobile talent in the context of the international work force. In doing so, they point out that knowledge is of particular importance and that it is spread most effectively by means of direct personal interaction, thus making international exchanges essential. This article is especially relevant to the research at hand as it specifically talks about the spread of knowledge through international work in the context of doctorate degree holders, which is the case for the professors interviewed in this study.

It is widely held that mobile talent contributes to the creation and diffusion of knowledge, particularly tacit knowledge as it is often shared through direct personal interactions. The international mobility of skilled human resources can play an important role in driving scientific progress, not only at the level of a given country, but also on a global basis. Highly skilled individuals exhibit particular mobility patterns whose implications have warranted attention by researchers and policy makers alike. It is for example known that the share of foreign-born among doctorate holders is higher than for other tertiary level graduates.

Figures from the OECD/UNESCO/Eurostat study on the careers of doctorate holders reveal that in 2009, an average of 14% of national citizens with a doctorate degree had been internationally mobile in the previous 10 years (AURIOL et al. 2013), confirming earlier findings reported in Auriol (APPELT et al., 2015).

In analyzing the scenario, the authors point out the percentage of national citizens with doctorate degrees that had been “internationally mobile” over the last ten years at the time of the study. This connects to the present study in that the interviews were conducted specifically with professors who had also been mobile. The present research seeks to build on this idea by elaborating on what effects were seen in the cases of these professors who spent time abroad while conducting research.

The aforementioned article also touches on how in the case of most countries, there are policies in place which encourage scientists to be active in pursuing research efforts that go beyond the borders of their own countries and involve international collaborations.

Most countries have in place a range of policies to encourage the mobility of scientists or highly-skilled individuals more generally, with policies that range from economic incentives to encourage inflows, immigration-oriented assistance, procedures for recognizing foreign qualifications and support for research abroad (OECD, 2008 and 2014b). There is generally more support for inflows of researchers and other highly-skilled than for outflows, perhaps because countries judge outward mobility to be already adequate or because they are reluctant to encourage it in light of the aforementioned arguments. The OECD Innovation Strategy of 2010 stated that policies on mobility should aim to support knowledge flows and the creation of

enduring linkages and networks across countries, enabling movement on a short-term or circular basis. Several national agencies and even non-profit organisations provide support for academic sabbaticals abroad and to host visiting researchers from overseas (APPELT et al., 2015).

This information is relevant to the study at hand because in the case of UNIFEI professors, as is true throughout much of Brazil, federal university professors also receive funding and support from their universities in order to carry out such international research projects. Such an idea can also be important in evaluating the motives of the professors in the study for being mobile. In other words, this provokes questions related to how much incentive and convenience motivate professors to do research abroad, and thus if they are making the choice to take on research overseas aware of the potential difficulties that they will face while outside of their native Brazil.

According to Guthrie *et al.* (2017), the answer to this question is that researchers tend to move or conduct research outside of their country for professional reasons. Professional motives seem to outweigh the difficulties in most cases as doing research abroad offers many professional advantages such as research networks, collaborations and access to specific expertise in addition to new resources that might not be available to some researchers in their home country.

Overall, researchers move primarily for professional reasons, whether in the short or long term. Key drivers on a professional level are the desire to develop international research networks and collaborations, and to access specific expertise, resources or prestige that allow them to progress their careers. (GUTHRIE et al. 2017).

In the same article, questions about culture and language are discussed in terms of how they factor into the decision-making process for a researcher to seek research pursuits overseas.

Other wider considerations also play into mobility decisions. Factors related to the culture, language and geographic proximity of destination countries shape patterns of researcher mobility, and children and relationships can act as a barrier to mobility, especially for women (GUTHRIE et al. 2017).

As will be seen in the results of the current research, all of these factors certainly do come into play in the case of the Brazilian professors that participated in the study at hand. Relationships and language, among other cultural aspects, seemed to be the most prominent in the case of this research.

Oliveira *et al.* (2016) agree with the aforementioned ideas that researchers tend to base their decisions of going abroad mostly on professional motives. The authors of this article also talk about how having previous international experience, such as participating in a conference, can increase the motivation for researchers to go abroad. This point, having or not having previous international experience, also becomes a very relevant point of analysis in the research at hand in determining if such previous experience had an effect on or made for a smoother transition in the case of the participants of this study.

In analyzing the motivation of the professors, it is obvious that academic and professional motivations override personal motivations. Only two professors indicate the wish to get to know another culture as an important factor in the decision to undertake academic mobility, because all of them had already had the experience of being abroad previously, especially in congresses, which to a certain extent had already given them some intercultural experience. We can see that although didactically separated between academic and

*professional motivations, the two are closely intertwined for the professors, since their professional motivations are linked to an academic career. The desire to develop an academic career, of having international experience in their career, of acquiring a high technical standard and forming a network of researchers and partners were elements identified in the **professional motivation** category. (OLIVEIRA et al. 2016).*

In a continued part of the same article, the authors offer additional insight that is specifically related to the context of professors in Brazil.

We perceive that academic motivations are very clear and matured, because with the exception of one case, all the other interviewees undertook mobility to achieve part of their PhD or a post- doctoral qualification. So the possibility of working with a researcher who is a benchmark in their area, the possibility of completing their academic formation and the desire to obtain knowledge not found in Brazil, were elements identified as being academic motivations (OLIVEIRA et al. 2016).

The authors point out here that in the case of Brazil, many professors tend to seek international research projects based on the “desire to obtain knowledge not found in Brazil.” This is useful in contextualizing the motivation behind why the participants of this study potentially went abroad in the first place. Moreover, it can be helpful in assessing the difficulties that the researchers had in that, perhaps in focusing on professional goals, they may not have placed as much focus on cultural preparation. It could also be that they simply have not been aware as to what extent this adaptation process would challenge them.

In another article relevant to this research, Leung *et al.* (2005) bring forth points related

to globalization and its effects in the present situation of the world of business and trade. Although the research at hand focuses on researchers and professors, these insights can still be applied since they involve similar characteristics in terms of knowledge exchange and the role of cultural influence. In the following citation, the authors introduce and define the idea of globalization. They then go on to talk about its role in the world of trade in the present day.

Globalization refers to a 'growing economic interdependence among countries, as reflected in the increased cross-border flow of three types of entities: goods and services, capital, and know-how' (Govindarajan and Gupta, 2001, 4). Few spoke of 'world economy' 25 years ago, and the prevalent term was 'international trade' (Drucker, 1995). However today, international trade has culminated in the emergence of a global economy, consisting of flows of information, technology, money, and people, and is conducted via government international organizations such as the North American Free Trade Agreement (NAFTA) and the European Community; global organizations such as the International Organization for Standardization (ISO); multinational companies (MNCs); and cross-border alliances in the form of joint ventures, international mergers, and acquisitions. These interrelationships have enhanced participation in the world economy, and have become a key to domestic economic growth and prosperity (Drucker, 1995).

In a later part of the same article, the authors offer insights focused on the role of multiculturalism within the context of globalization. These insights are more directly connected to the aims of the current research as they indicate how culture is shaping the experiences of the participants of this study.

Role of multiculturalism and cultural identity the broad ideological framework of a country, corporation, or situation is the most important determinant of the cultural identity that people develop in a given locale. The 'melting pot' ideology suggests that each cultural group loses some of its dominant characteristics in order to become mainstream: this is assimilation, or what Triandis (1994) calls subtractive multiculturalism. In contrast, when people from a cultural group add appropriate skills and characteristics of other groups, it may be called integration, or additive multiculturalism (LEUNG et al. 2005).

The ideas suggested here about the “melting pot” ideology also connect back to the ideas brought forth in other articles about how the transfer of knowledge is most effective in the situations of direct contact. Furthermore, as a natural consequence of this, cultures are “melting” together and the ability to adapt and be flexible on the behalf of the person going abroad as well as on the behalf of the people involved on the host nation’s end, is essential for this process to be successful.

2.4 - CONSEQUENCES OF CULTURAL INFLUENCE

Many problems can be listed when talking about working conditions and management operations in the context of international projects. However, one thematic response that seems to be appearing in the literature a lot, is tendencies of organizational conflict. Between different cultures, one thing that seems to be consistent is the inconsistency of how to approach decisions from an organizational standpoint. One such example comes in the following article:

Other factors deducted from the interviews and focus groups were to do with the differences in work practices. For instance, in Middle-Eastern countries it is very common for projects to run beyond the anticipated time

and cost parameters. This could be attributed to various reasons such as protracted planning and approval processes, contracts not being taken seriously, unsystematic contractor selection, incompetence of project parties, absence of risk management plans for the projects, interference from government and other project stakeholders, etc. (COATES, et al., 2012).

Here is a clear cut example of how British companies are dealing with issues in the organization of projects throughout countries in the Middle East. Due to differences in their organizational approaches, expectations of international project managers are not being met. One can see in this text that issues being raised range from contractual issues, incompetence within the group of workers, risk management and governmental interference. All of the previously mentioned problems are ones that influence the outcome of project management and the project itself. Additionally, these issues can determine the economic gain from a project, and in turn result in negative relations in the future between the entities involved.

Another example is given in the article to follow where organizational culture differences are discussed in respect to how they determine the outcome of projects with international contractor involvement.

As responding entities against stimuli, international contractors have their own unique organizational culture. It will dictate the way an organization responds to environmental stimuli (SCHEIN, 2010) and hence determine organizational decisions. According to the cultural theory, cultural adherence and social learning are the main determinants of risk perception (DOUGLAS AND WILDAVSKY, 1982).

What can additionally be gained from this article, is the insight it offers on risk perception. Risk perception is a highly regarded aspect of international project management

nowadays since it is ultimately a cost as well as a liability. International project managers have developed their own organizational culture, as drawn from the text, in order to manage things as risk operations and in order to sustain the environmental stimuli in a given work atmosphere. Through both of the cited examples, it is apparent that the organizational level of international project management is being given a higher regard and being viewed as a very fundamental and critical part of the overall process (ABDUL-RAHMAN, H., LOW, W.W., ZAKARIA, N. 2015).

2.4.1 - Adaptation and Accommodation

Integration can easily be affected by too little central control. Basically, with a lack of central control, integration falls out of place and ceases to function. In relation to this, allocation of resources and workers is a component that must be executed correctly throughout research centers and international projects in order to keep things well-organized. As will be seen later in this research, organization tends to be one of the key components that international managers hail as being of the utmost importance. Simultaneously, it tends to be one of the most problematic areas in international management.

Among other challenges that both workers and managers overseas working on international projects will face, some particular fundamental issues are those of accommodation and adaptation. Workers overseas will often face challenges that will present project managers with more challenges in accommodating them to assure productivity. As previously analyzed, creating an understanding that leads to trust is essential in the dynamic of relationships amongst employers and employees in the international project work environment. In the case of many, international workers must also feel safe and comfortable in order to produce effective results on their projects. For this reason, project managers and international business experts are currently giving a lot of attention to accommodation and adaptation phases to ensure that the international individuals involved in a project will be able to conduct their work in a manner that is economically sound for both the project and the leaders involved. In the following article, special attention is given to this particular component of these challenges that are a part of international projects.

However, the expatriate will be challenged with differences in cultural norms, regulations, routines, work cultures, institutional work practices, safety standards, etc., which can manifest themselves as added costs, delays and conflicts on these assignments (Chua et al., 2003; Miller & Lessard, 2001 and Orr, 2005). Grove (1990) and Fish (2005) appropriately suggest that expatriates need to possess the ability to deal effectively with frustration, stress, different political systems, interaction with strangers, intercultural and business dimensions.

What is of particular interest here is the challenge of cultural norms that the expatriate will face. In this citation, the consequences of this common scenario are given directly. The term "work culture" is mentioned which is very important to think about as the core purpose of this research is to think about how culture affects work in the international setting. Essentially this breakdown is what is happening in the international project context, which can account for the complications. The "work culture," or culture created in the workplace, is ultimately what international projects aim to address in a way that results in productivity. Several factors contribute to this complex atmosphere as can be derived from the text. Everything from different political systems to interactions with strangers that are foreign to an individual involved in an international project can potentially make them feel uneasy in their new living and working environment. Worse yet, this can lead to further doubts in relationships with their peers in areas of trust and understanding. Ultimately, these things can have a great effect on work performance, thus resulting in additional costs, delays, lack of productivity and even conflicts within a given operation.

Fortunately, there are amiable solutions presented in this same piece of literature. In fact, the article does a splendid job of laying out the necessary steps involved in how project managers can effectively choose the people they want to be involved and continues to discuss accommodating international employees and giving them the specific cultural awareness and training they need in order to successfully adapt. The breakdown of adjustments is listed below.

Two important pieces for helping the process are given, which are the "how projects are being affected" examples that this study aims to address.

Expatriate Selection: During the anticipatory phase, when considering individuals for foreign assignments, the most important organisational factors to be considered are the criteria and the process of expatriate selection (Black et al., 1991). This has been substantiated by researchers, who have long been advocating effective recruitment and selection systems for successful expat assignments (Tung, 1981, 1982). In spite of this, to date, most organizations continue to rely on technical skills and domestic track record as the criteria for selection (MORLEY AND FLYNN, 2003; SPARROW ET AL., 2004).

Cross-cultural Training Cross-cultural: training is an intervention to escalate an individual's aptitude to deal with and perform in an unfamiliar environment (Tung, 1981). Studies by Mendenhall and Oddou, (1985); Tung, (1981); suggest that comprehensive cross-cultural training is helpful in building an expatriate's cross-cultural skills and competencies. Trained expatriates are able to carry themselves confidently and work efficiently with less supervision (GUTTERRIDGE ET AL., 1993) and have the potential to predict success on international projects (PARKINSON AND MORLEY, 2006).

The first step in selecting individuals to take part in an international project is the screening process illustrated in what is referred to as "Expatriate Selection". This is the process of selecting individuals who demonstrate adaptability. One can currently see this taking mass

effect in the global market in how employers place a special importance on the areas such as cultural awareness and international experience on their resumes and in job interviews. Secondly, project management is responsible in providing "Cross-cultural Training" if the employers want to be efficient in transitioning their employees to life overseas and setting them at ease in order to make productive workers who will contribute effective results to the project. "Cross-cultural Training" is viewed as training that can take place before leaving one's country as well as on sight in the host country (usually phases of both are performed in order to transition workers in the best way possible). This involved process teaches the "selected expatriates" the norms of the culture of the country where they are going to live and gives them insights on how to cope with the challenges they will potentially face. Being prepared and aware of such differences before entering a new culture is psychologically beneficial for all parties involved and makes for the best transitioning.

After the individuals selected to participate in an international project are chosen and go through their initial phases of cross-cultural training, they will go through three major periods of adjustment while living and working in a new country:

Interaction Adjustment: This aspect deals with the comfort levels when dealing or interacting with host country nationals at work and in non-work situations (BLACK AND STEPHENS 1989). It is also suggested that interaction is the most difficult of the three facets of adjustment.

Work Adjustment: This involves adapting oneself to the new job tasks, roles and environment. Work adjustment is easier if there are similarities between the parent and the host subsidiary in terms of procedures, policies and task requirements (BLACK AND STEPHENS 1989).

General Adjustment: This second facet deals with overall adjustment to living in a foreign land and adjusting to its culture (BLACK, 1988). It comprises

factors such as housing conditions, healthcare, cost of living, etc. (BLACK AND STEPHENS 1989).

As can be derived from this information, things such as comfort and adaptability are at the forefront of the adaption process. The correlation between this and the "Cross-cultural Training" aspect of transition are no coincidence. The "Expatriate Selection" and "Cross-cultural Training" are built upon the research that was developed into these adjustment phases in order to ease transition of working internationally.

2.4.2 - Cultural Differences and Potential Foreseen Complications

In addition to the previously cited article, Bredillet (2010) offers more about where individualism is highlighted as being prevalent in societies where people maintain looser relationships amongst the collective group. This article, in particular the following citation, brings a further developed idea of the "individualism component" necessary to frame and contextualize the realization of this research pertaining to research happening in a society of this description.

The individualism/collectivism dimension is defined by Hofstede and Hofstede (2005), as "individualism pertains to societies in which the ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family. Collectivism, as it's opposite, pertains to societies in which people from birth onward are integrated into strong, cohesive in-groups, which throughout people's lifetime continue to protect them in exchange for unquestioning loyalty" (PHENG AND LEONG, 2000).

The concept of everyone being expected to look after himself or herself is especially crucial from this quote. Immediate family is next to follow in who one looks after. This

description is very consistent with culture, especially work culture in the United States. It is very common that a manager, boss or academic advisor responsible for guidance during a research project will grant those under them the freedom to work independently on any type of project or research they might be undertaking. Along with this freedom, however, comes the expectation that the student or employee will have the knowledge to take care of himself or herself and accomplish all of the necessary steps in their project or research without further assistance from the point that an expectation of what is to be done has been established.

A relationship of reliability is then forged and understood to be honored by someone from a host country characterized by such a cultural quality. A foreigner from a more collective culture, a Brazilian for example, might not necessarily recognize or be aware of such an operating code of conduct. In this respect, communication, which will be further analyzed below, can be full of miscues and misunderstandings due to cultural cues that are seemingly inherent to one of a particular culture but completely unrecognizable to someone of another culture.

As Bredillet (2010) highlights, collectivism is a trait of countries where people are born into groups that form strong cohesion amongst themselves. A fundamental difference between these two characteristics, individualism and collectivism, gives way to a lot of room for error in terms of expectations in a working relationship. Simple communication cues that are taken to be implied by one person but in reality not perceived by another, along with potential feelings of anxiety and lack of comfort which can have a severe impact on quality and quantity of production, or in the case of the present study, research results.

Also pertaining to the research at hand, and as was touched on in the end of the previous citation, is the dependence on loyalty in collect groups. In the context of Brazilians conducting research in the United States, it could be an issue that as a collective community thinker, a Brazilian might depend on someone in their work circle to be loyal or simply reliable. Meanwhile, when in minding their individualist way, an American might place more priority on looking after himself or herself and in fact could fail to meet what the Brazilian thought was a given expectation. Initially this could have a negative impact on the research in that moment, or make for a setback. Long-term consequences, on the other hand, could lead to more critical and fundamental issues such as trust and communication problems that could have an even more profoundly negative impact on the research being carried out.

In the context of potential complications due to differences in culture, one that can certainly not be overlooked is the area of communication. In the following article, a difference is established between what the author refers to as "one-way" and "two-way" communication. It is important to note that this is discussed in the context of business management. In fact, the term "senior manager" is used. However, in the context of this project, this research is still both valid and relevant as the same principles of a research "boss," or one who manages the research, is present and the same variable of communication between someone who is responsible and the workers, or researchers.

The dichotomy of one-way as opposed to two-way communication can also be an issue in cross-cultural management. One-way communication is characterized by the use of authority by the superior with the subordinates providing little or no feedback, which may be perceived otherwise as a challenge. This is prevalent in societies where there is a desire to preserve social harmony and to avoid situations where disagreement may arise. In organizations where one-way communication dominates, attempts by senior managers to involve their subordinates in decision-making may threaten social norms and be resisted. On the other hand, two-way communication is adopted when a company enters a new market and jobs undertaken by employees are no longer routine. Complex and frequently open-ended situations may render the need for managers to adopt a more participative style of management by involving their subordinates in decision-making. (PHENG AND LEONG, 2000).

The hierarchy and power to make decisions independently can be a very effective or ineffective variable in the context of cross-cultural research. In the United States, it is common for a boss, or research manager, to grant freedom and independence to their workers or

researchers and encourage them to be more pro-active in their decision-making. As Brazil tends to have a more community based culture, at least when compared to that of the United States, this is a potential difference in communication efforts that could have a range of subtle to great impacts on the overall quality and timeline of research that is done. The previous quote specifically talks about open-ended situations where people do not know how to interpret if a manager wants them to make their own decisions or wait for their manager to give more specific instructions. It is also possible that a Brazilian worker could be more used to having to follow a stricter order of procedures in conducting research and that their US research manager gave them more freedom which resulted in less productivity due to not having a basis by which to organize their research approach and methodology.

Another example of how unestablished communication methods can influence the work comes in the following article where the author talks about openness of interpretation in specific communicative situations.

When nothing is purposefully set up to manage differences, heterogeneous interpretations and practices coexist. For instance, in the R&D consortium, partners from Southern Europe extensively express their opinion while those from Northern Europe and especially Scandinavia only speak up when they disagree with what is being said (CHEVRIER, 2003).

In the context of the research at hand, it will be important to consider these communication procedures and how the Brazilian participants felt that this affected their ability to establish their own research methodology, or perhaps hindered their opportunities to develop and carry out their research due to having a lack of structure. As previously mentioned, Americans tend to be more independent in how they grant their workers, or researchers in this case, the independence to conduct their own research and make their own decisions more freely. Being that Brazil is generally more community based and structured culturally in terms of these facets, this could potentially influence the productivity and quality of a given research project.

A final point of consideration is the fact that both the United States and Brazil are big countries in terms of both their geographical size and with respect to their populations. This is important in the context of this project as cultural values at play in international project development can be influenced and differ from region to region. Such regional differences can come into play in the demographic representation of Brazilians conducting research in the United States as well as have a different effect on the work depending on the region within the United States where the project was carried out. In the following citation, the author Muriithi (2003), highlights this point well in discussing the different ways in which cultures can vary within the same country.

Cultures vary from country to country, and within countries. As a result, values at work, and in social settings will vary accordingly. Personal choices and work values are culturally dependent. Central to validity of cross-cultural management concepts therefore, is the supposition that these variations can be measured, or at the very least represented. (MURIITHI, 2003)

What is especially important in this citation is the consideration of cross-cultural differences at play, specifically in the context of the workplace and those relative to management interactions and relationships. This is certainly relevant as Brazil and the United States fall into this category of having various cultures within each country. With this in mind, perhaps it would be interesting to draw on Hofstede's numeric values assigned to particular countries based on different aspects of their culture. In the same manner, a numeric rubric will be established to assess the various cultures represented in the geographic representation of the participating Brazilian professors in this study.

CHAPTER 3: MATERIALS AND METHODS

For the completion of this research, the qualitative approach was utilized in order to reach an understanding about this particular phenomenon in a significant way that was evidenced. Qualitative research allows the analysis of a discourse that goes beyond the analysis of the message, but reaches the latent meanings of the contents presented.

Descriptive research seeks to solve a problem by improving practices through observation, analysis and objective descriptions. Exploratory studies serve to increase the degree of familiarity with phenomena that are still considered relatively unknown. This type of research helps to obtain information about the possibility of a more complete investigation, to investigate the human behavior that professionals of a certain area consider crucial, to identify promising concepts and variables, to investigate something that is not studied or that is unknown (GIL, 2008; TOLFO, 2000).

Regarding the scope and depth of the research, a case study was chosen so that it was possible to reach several objectives, among them: giving a description, testing or creating theories. The case study is as a detailed description of the individuals followed by an analysis of the data (CRESWELL, 2003). In this type of study, multiple sources are used to search for evidence and to triangulate the information in the analysis and interpretation of the data. In the case of this research, the perception of the expatriates and the consequences of cultural influence in the execution of an international research project was sought to be better understood.

3.1 - DATA COLLECTION PROCEDURES

The search of the information necessary for this research was done through interviews with expatriate Brazilian professors that participated in international research projects in the United States. Data collected in an interview allowed for greater spontaneity and freedom on the part of the respondent when answering the questions, as well as giving value to the researcher's presence (TRIVIÑOS, 1987).

In a stage prior to giving the participants the survey, the selection of professors was done with the help of an official list maintained at the UNIFEI of professors that have participated in international research in the US. After the selection of the target population, a script of the interview was sent to the interviewees for them to fill out as well as the code of

ethics that contextualized the study in which they would be participating. This interview and prefaced code of ethics that was sent along with the interview can be found in Index B. The interview sought to answer and understand the main theoretical difficulties presented in the literature review and to highlight whether or not these experiences lived by the individuals of the study and the difficulties presented within them corresponded to the theoretical proposals presented. Figure 1 shows the scheme followed, along with the main categories of factors and sub-categories of influence in the experiences of the Brazilian professors in the context of their research projects done in the US.

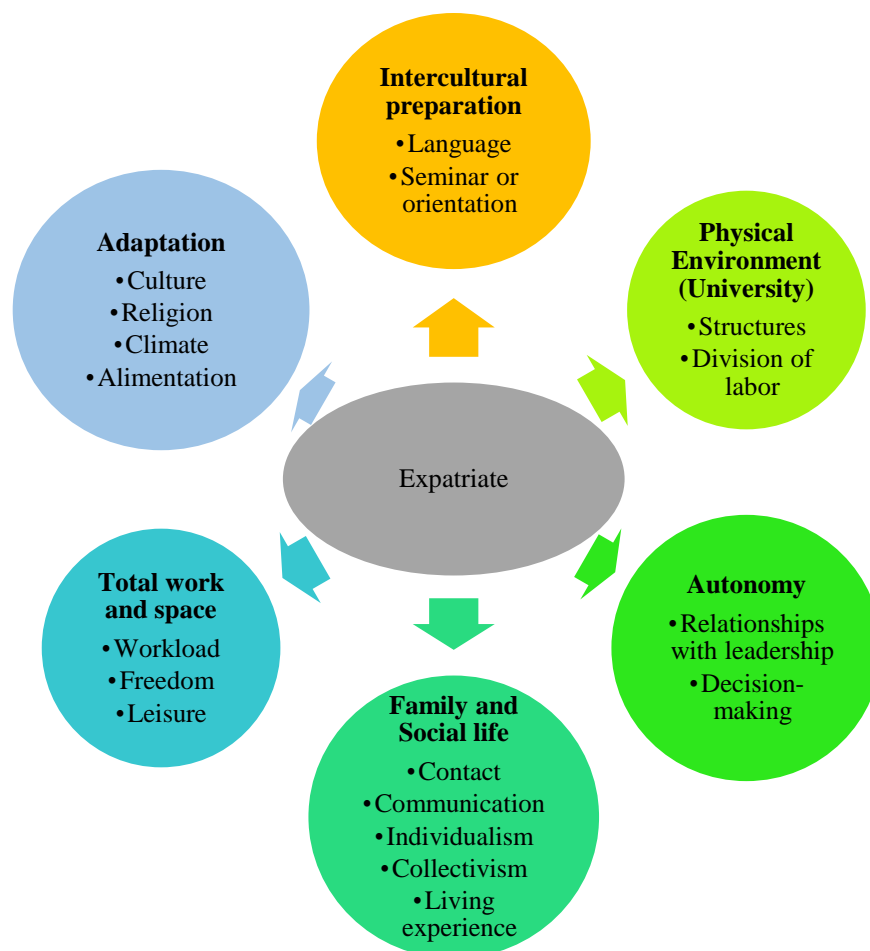


Figure 1 - Scheme showing the factors analyzed in the interview with the purpose of determining the main influence factors in international research projects from the interview of the expatriate professors/researchers who conducted research in the United States. Adapted from Bardin, 2004 [6]

3.2 - DATA INTERPRETATION PROCEDURES

From the data collected, it was sought to establish an understanding of how much impact culture had on the Brazilian participants involved in the study so to confirm the research presuppositions or determine if they could not be confirmed while answering the question asked and broadening the knowledge about the researched subject.

For this purpose, two main techniques were used to interpret the data: (a) analysis of the importance of values assigned to each factor exposed to the interviewee, in order to obtain quantitative values of the influence of each factor; (b) analysis of the discursive content of the semi-structured interviews where the interviewee could cite negative and positive points from their experience in the United States.

The comments from each participant that were deemed the most significant and relevant have been transcribed in order to conduct a thorough analysis of the descriptive data gained from the questionnaire. This interpretation procedure was used with the intent of discovering and going beyond the numerical data of importance values that was obtained. It helped in understanding how the participants of this study viewed their experiences and revealed insight regarding how they think about and act in such situations. Thus, this led to a better understanding of how each individual's point of view can affect the data collected and the results of each questionnaire. The objective of this was to identify and characterize the convergences and divergences presented by each interviewee.

The information collected through the importance values were recorded and grouped by factor, connected and evaluated individually and together by means of arithmetic. Each factor aimed to identify the behavior of Brazilians who participated in projects in the United States.

CHAPTER 4: RESULTS

4.1 - PROFILE OF INTERVIEWEES

As mentioned in the methodology section, the interview included both closed, fixed-answer questions as well as open-ended questions where the participants could respond in as much detail as they wanted to about a particular topic. In this section, the former will be discussed as it was these closed questions that were included in the survey in order to establish a profile of each participant. Profile questions on the survey included data regarding sex, age, religion, ethnicity, marital status and Brazilian state of origin in order to not only determine the profile of the given subjects, but also to evaluate these factors in the data analysis section and more accurately assess if and how much influence culture had on these particular participants. For example, comparing results between male and female subjects might be relevant to certain aspects of a cultural exchange where ethnicity or religion might come into play in another facet. With this in mind, geographical distribution was also taken into consideration both in respect to the origin of the participant in their native Brazil, along with where they lived in the United States. This is important in comparing culture of any countries, as regional variances are certain to exist. However, an importance was placed on this in the case of this study particularly because both the United States and Brazil are geographically immense countries with many known cultural differences to exist from region to region.

The year or years during which the participant lived in the US was a piece of information requested in order to reflect on cultural tendencies that may have changed over time. As questions regarding the political situation were also on the survey, the year or years in which the subject lived there must also be considered in the political context of the specified time. Safety measures on a local level, or due to historical events or political tendencies of the given time, can also be a determining factor in how the participant received this aspect of US culture. Linguistic ability was a final point of consideration. The importance of this is two-fold. Greatly due to the contributions of the literature review in framing the context of this study, linguistic ability was analyzed as it is a major part of both communication, and consequently of trust. These were two essential components seen in the literature reviewed in order to complete this study. Secondly, language is vital in comprehension and contextualizing culture. Thus, linguistic ability was given special attention in that it can be a factor in determining how much a given participant was able to accurately interpret and comprehend in their living situation. However, this study does not consider language the only factor in assessing a participant's

ability to communicate and comprehend their living situation.

With the exception of one subject, the participants of this study were chosen among professors at the Federal University of Itajubá (UNIFEI). Researchers were selected from an array of areas including Production Engineering, Electrical Engineering, Statistics, Psychology, Physics and Social Development and Technology among other areas. Data was collected from 11 participants of which seven were male and the remaining four were female. This ratio comes as a consequence of the demographic distribution of male and female professors at UNIFEI being predominantly male. Moreover, as the study was limited to professors that have lived and conducted research in the United States, the list of potential qualifying participants was even more so weighted in favor of male candidates.

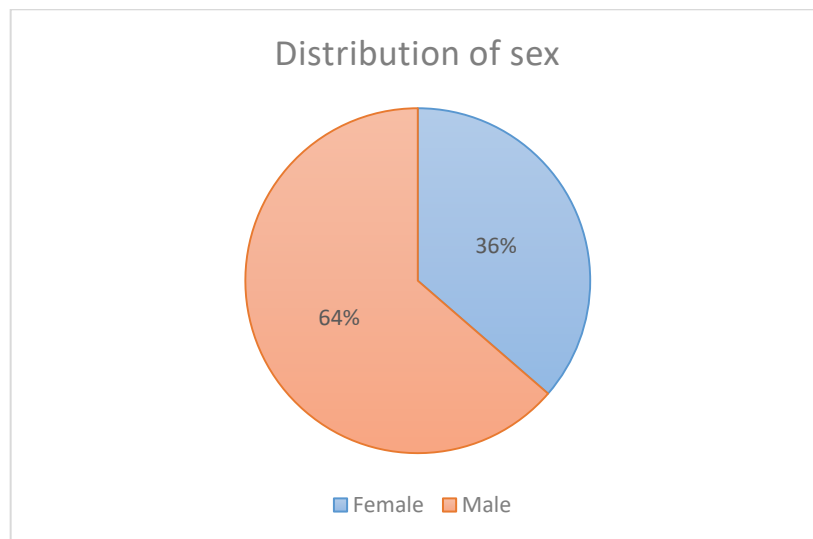


Figure 2 - Distribution of sex

The age of each participant as identified in this study was documented by requesting each subject to indicate which of the intervals seen in Figure 3 they belonged to. As can be seen in the graph, the age range was relatively equally distributed between the age groups assigned.

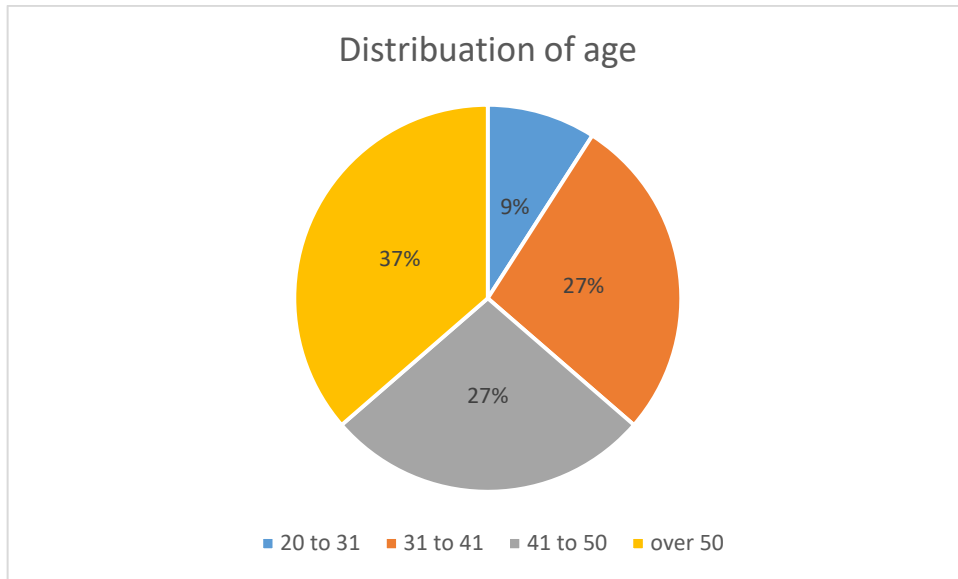


Figure 3 - Distribution of age, showing that 37% of participants were over the age of 50.

Figure 4, of “State of Origin” appeared as a question on the survey as a means to better contextualize the culture of origin for each participant in this study. As such, this information will be considered in the final analysis in an attempt to assess and better respond to questions of why a particular subject might have been a problem or particular difficulty related to any array of any specific cross-cultural issue that can present itself at the time of living and working outside of one’s native country. Almost half of the participants, five out of eleven to be exact, reported that they were from the state of Minas Gerais, also home to UNIFEI. Another four participants were from the neighboring state of Sao Paulo while both Espírito Santo and Rio Grande do Sul had representation of one subject each. This data will additionally be cross-referenced with information related to the states of residence while in the US as an evaluation method in comparing specific cultural components from the state of origin with regional cultural aspects in the US state where the participant lived and worked.

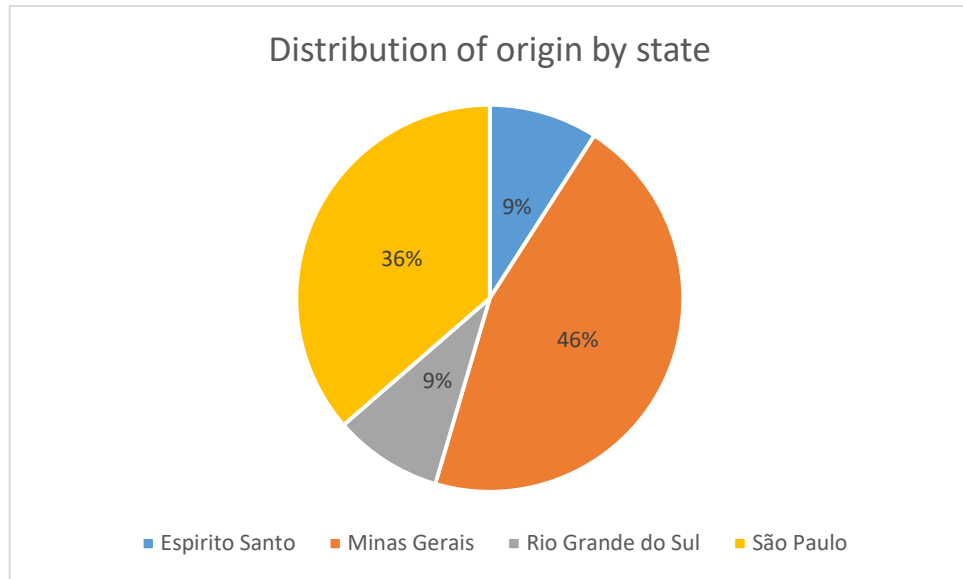


Figure 4 - Distribution of origin by state shows that almost half of the participants are from Minas Gerais, the state of the university where the study was conducted.

Marital status (Figure 5) was taken into consideration in this study in order to relate this information to another part of the survey which was rating the importance of family as a cultural value. This data also gives insight as to what was the social dynamic of the subject and in part be used as an instrument of measurement in determining the social life and interaction information given by each of the participants' on their surveys. The majority of the participants (73 percent) were married at the time of living and researching in the US. For these subjects, a further analysis will be conducted based on their responses to continuation questions of whether or not their spouses went to the US with them at the time of living there. This is done to compare data regarding how much importance a particular candidate placed on family, living situation, social dynamic, *etc.* with how they evaluated their living situation in the US. For example, if a participant said that family was very important but he or she lived away from their family for a year in the US and then went on to say that they did not participate or feel comfortable in the culture of the US, this might not necessarily be related entirely to culture but also to the fact that such a subject was spending their time in the US alone or making an extended effort to stay in touch with their family in Brazil rather than interacting with Americans in the context of US culture and society. Of the remaining four participants that were not married, only one reported that they were divorced while the other two identified as single.

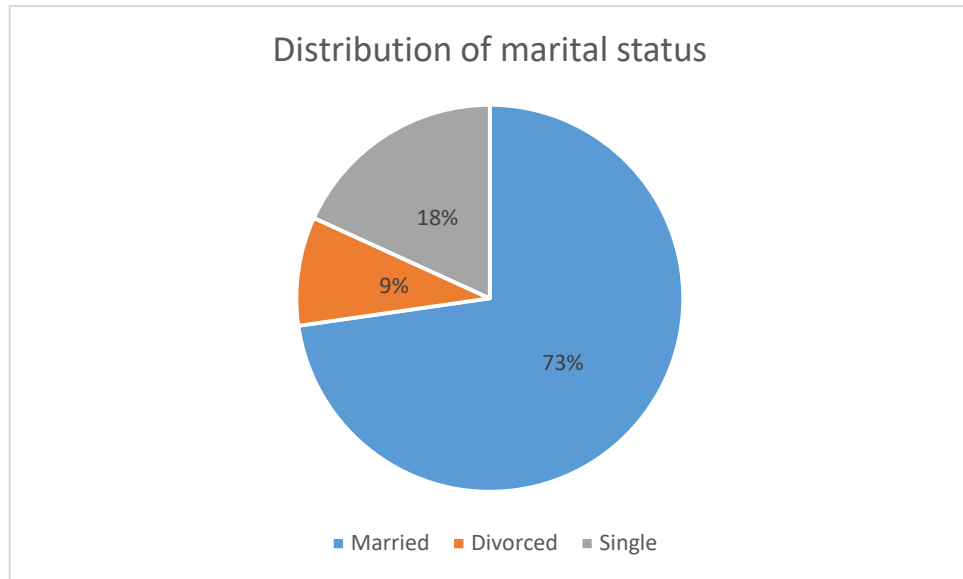


Figure 5 – Distribution of marital status, where one can see that 73% of the people in this study are married.

The survey included a question that asked each participant to self-identify ethnically (Figure 6) in order to contextualize how their living situation may or may not have been affected by this particular characteristic. Basis for this is centered around the fact that although universities in the US promote diversity and abide by strict policies related to anti-racism conduct, many reports of racism from all corners of the country have surfaced throughout even the last couple of decades. It is also worth considering that such reports of racist behavior as well as certain individuals feeling targeted or deprived for reasons due to their color have also been surfacing in Brazil over recent decades. This data can serve as a tool to identify if the ethnicity of any of the participants had an influence on how they were treated, the problems they dealt with and/or how they felt they were accepted or viewed by US nationals. As nine of the participants consider themselves white, this data will also be used to isolate xenophobia of foreigners from racism based on color. It is also noted that because the results were limited to a total of two people who identified as “*pardo*” and there were no participants who identified as black or Asian, results of this data are in fact limited. This will be taken into consideration in the analysis and conclusion of this study.

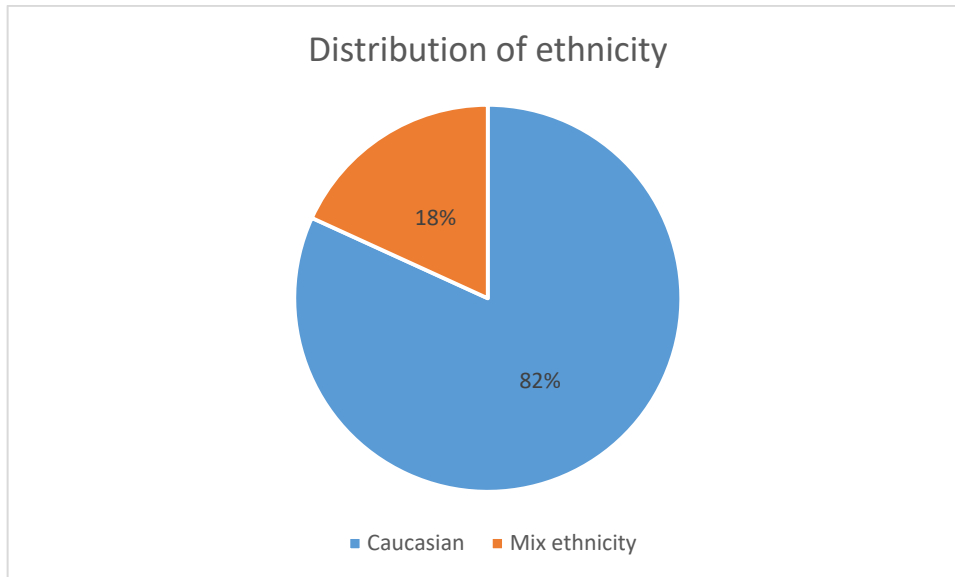


Figure 6 - Self-identified ethnicity taken in order to contextualize how the participants living situation's may or may not have been affected by this particular characteristic.

Identifying participants by religion was a slightly more complicated process and involved a two-part question as opposed to just a simply one-off response question (Figure 7). The first question considers how the the participants identify in terms of their religious beliefs. From this question, the results all fit into three categories. Of these three, Catholicism was the category that gained the most responses with 64 percent of subjects attesting to the religion. Another three participants, 27 percent of the sample, identified as Spiritists. Finally, the remaining 9 percent (one participant) said they consider themselves atheist. However, this information alone was not considered sufficient for characterizing the profile of each participant for the sake of this study. Thus, a second, and perhaps more identifying question, was included to further contextualize the religious background of each subject. In the second question, the participants were asked to give an indication of whether or not they were actively practicing their religion, or rather if they were actively participating and practicing at the time of living overseas. From this, as can be seen in the graph below, only four of seven participants who claimed affiliation with Catholicism in the first question consider themselves practicing Catholics (Figure 8). Likewise, two of the three Spiritism affiliates also consider themselves practicing Spiritists.

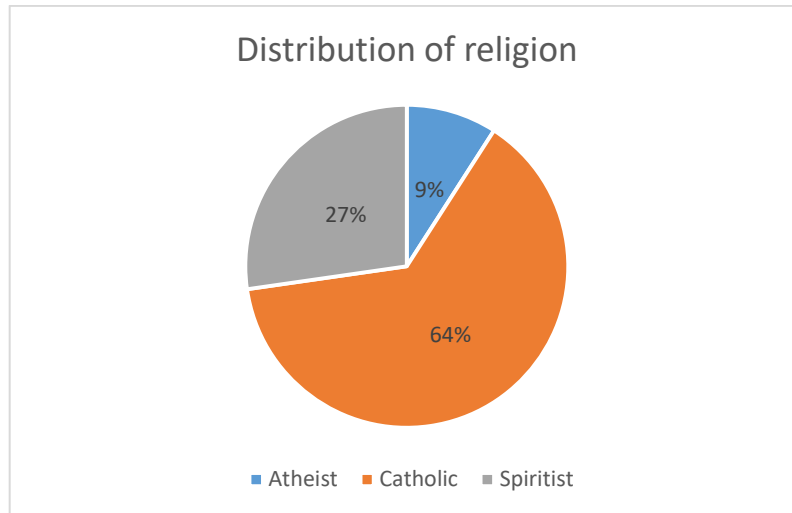


Figure 7 – Distribution of religion

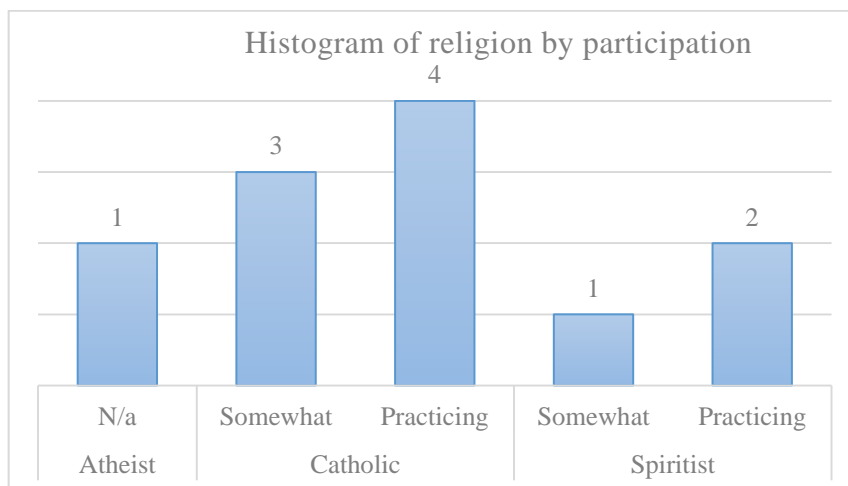


Figure 8 – Histogram of religion by participation

In the context of this study, data related to religious affiliation and habits will be used as a reference to gain better insight on the open-ended questions to which the participants responded related to their living situations and societal values. As the open-ended questions were focused on the contextualization of each participants living situation and how they were able to feel comfortable and thrive in their respective living situations throughout the US, identifying religious habits was important to get an idea of how important this facet of social life outside of work was. Much like determining ethnicity, this was done to see if it had any influence on how they were able to cope with everyday work difficulties and fit into their social environment. This was specifically important for determining cultural values and for

identifying the influence of culture in this study since, in some cases, religion can be considered a very influential aspect of culture. Therefore, this data was important for helping contextualize the open-ended questions in the survey related to each of these areas.

4.2 - ADAPTATION FACTORS

Taking into consideration that the literature review gave severe indication of the importance of adaptation for workers living outside of their native country, so too did this survey highlight the importance of the adaptation process for the participating subjects. Successful adaptation was consistently discussed throughout the literature as being vital to any foreigner living and working overseas. Trust was another highlighted aspect of living abroad that was seen in the literature that was a consequence of successful adaptation in many cases. In other words, trust can be viewed as a secondary level aspect important to the successful productivity of a foreigner while adaptation is a primary level aspect more fundamental to the process and in many cases directly related to and influence of whether one feels trust in their living situation. Similarly, comfort was also a highlighted characteristic said to be equally vital in several cases as observed in the literature. In the case of comfort, adaptation is also a fundamental component that can influence and determine the rate of success at which a foreigner is able to gain such an entity.

In this study, participants were asked to give a numeric value of 0-10 to rate what they considered the importance level for them in nine categories related to adaptation (Figure 9 and Figure 10). The nine categories included: 1) social life; 2) communication; 3) distance from family; 4) alimentation; 5) safety; 6) religion; 7) politics and bureaucracy; 8) laws and rules; and 9) weather. These categories were strategically selected based on evidence from the literature that each particular area does in fact contribute to the overall adaptation process. In addition to this strategic effort, the given categories were also chosen as they naturally reflect different facets of culture and thus can facilitate the categorical measure and analysis of culture and in what areas it is having more impact. This data will additionally be cross-referenced with previously mentioned data regarding family and living situation in an attempt to contextualize and analyze the adaptation process for each individual participant.

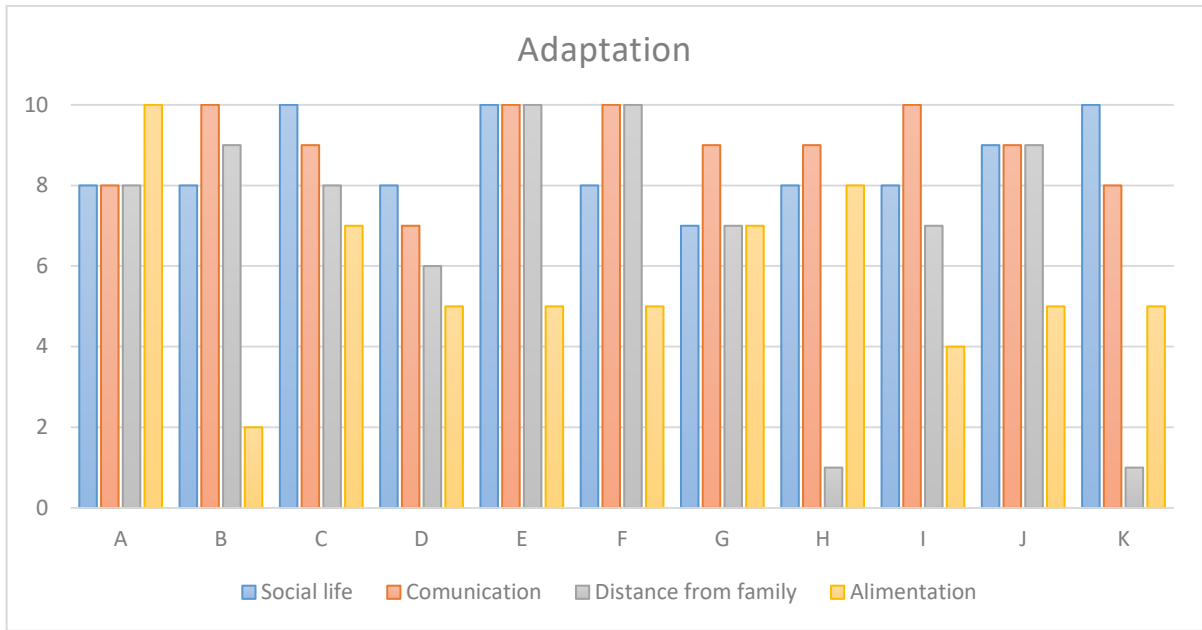


Figure 9 - Adaptation graph showing the primary factors (social life, communication, distance from family and alimentation) for adaptation.

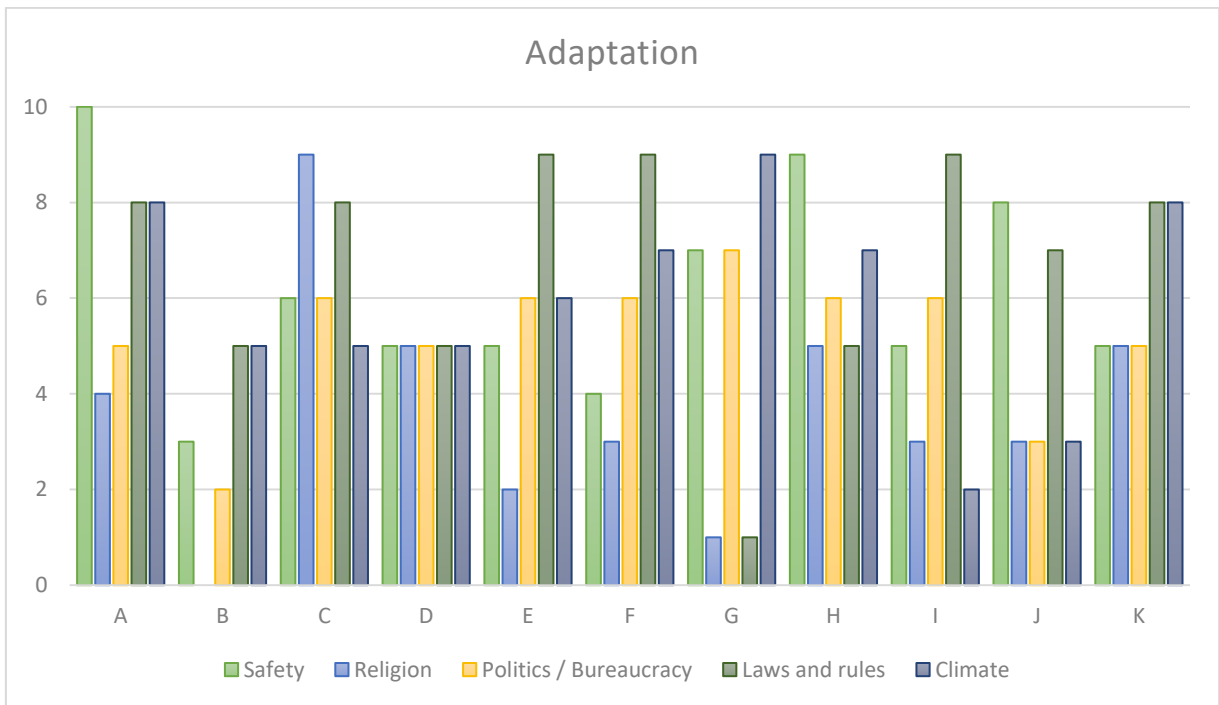


Figure 10 - Adaptation graph showing the primary factors (safety, religion, politics/bureaucracy, laws and rules, climate) for adaptation.

Between the two graphs, what is shown is the numeric value that each participant gave to each of the nine aforementioned categories. Communication consistently ranked the highest among participants with an average score of (Figure 11). This data is perhaps the strongest result from the closed question part of this study as it is consistent with, and tends to confirm,

what was found in the literature related to comfort and trust being of the utmost importance when determining international success for people living and working outside of their native country. In the next part of this discussion, more context will be given to the values placed on communication by each participant by analyzing this numeric value given to communication in the context of the question about language ability at the time of living in the US. This will be done in order to scan the data for correlations between how well the participants considered themselves in terms of English language ability and how stressed they were regarding the importance of communication in a foreign country.

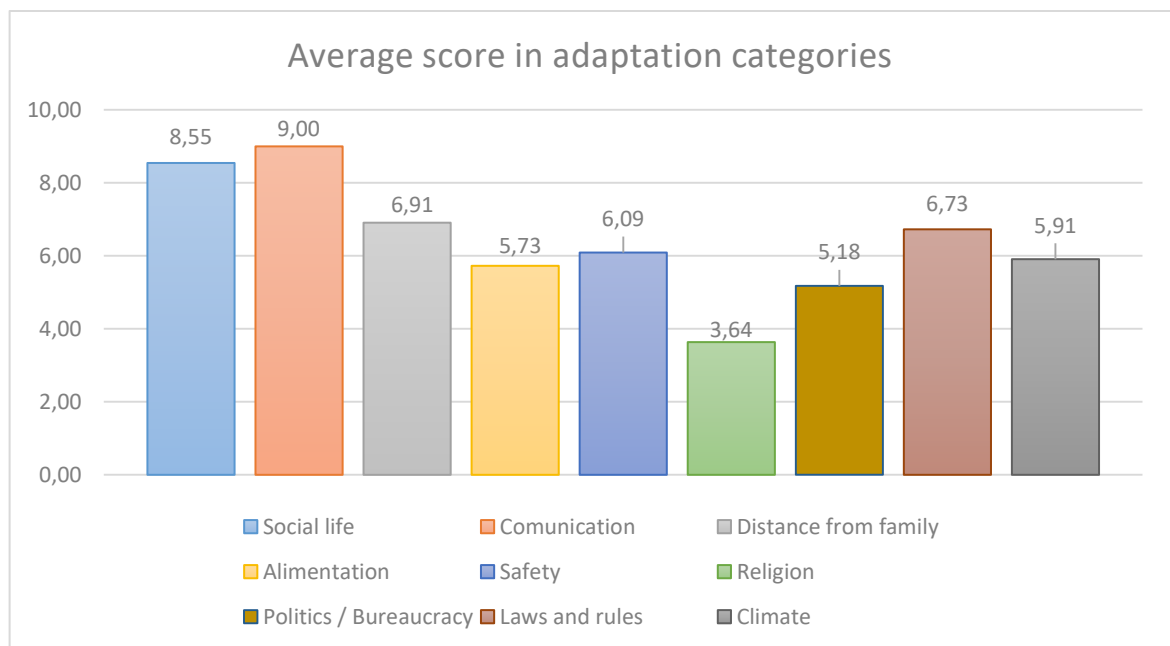


Figure 11 - Adaptation graph showing the average of all categories applied.

By average score, the least importance was placed on religion by participants. Religion had an average score of 3.64. Referring back to the previously analyzed data regarding the closed questions about religious identity and practice habits, this data does not come as a surprise when considering that only 64 percent of the subjects identified as being a practicing member of their affiliated religion. Of the other 36 percent, one participant identified as atheist and the other three reported that they were “more or less” a practicing member. As such, it was also not surprising that more than one participant placed an importance value of zero on this category. The highest score, which was a 9, came from a participant who confirmed being a practicing Catholic. The next highest score in this category was a 5 and was appointed by just two individuals. This suggests that, religious and practicing or not, religion in the context of

social norms and the societal living situation, Brazilians do not tend to be very concerned with this characteristic of living abroad, at least in the case of living in the US. This data does not eliminate the possibility that a Brazilian could be concerned about this or even run into problems while in the US but it does seem to demonstrate a relieving tendency of this aspect in terms of what workers and researchers should concern themselves with in order to better prepare for living and working experiences while overseas. At the very least, this is suggested in the case of Brazilians living in the US.

A category that had scores ranging from as low as 1 all the way to a high of 10 was the distance from family category. In this case, further contextualization of which of these participants lived with their families in the US and which of them lived alone at a distance from their families in Brazil, must be considered in order to make complete sense of and validate the consideration for this data. In this regard, results tended to be consistent with the idea that those participants living abroad without their families tended to give this category a higher score while those who had a spouse and/or their kids with them, tended to place less importance on this. However, there were exceptions. Examples of participants living in the US with a spouse and giving a high score to the distance from family category did appear in the results. Both examples were of the female sex. This information will be important in assessing how researchers and workers overseas can be more prepared and productive while living and working abroad. The two lowest scores in the distance from family came from two males that lived with their wives and children at the time of staying in the US. This is consistent with the previous idea that perhaps women place more value on this category than do men. Similarly, this data also tends to confirm that in the case of men living abroad, they tend to place less importance on the concern of living at a distance from their family. Such data is necessary in determining how researchers and workers can be better prepared in order to become more successful and productive contributors in the work and research environment, which is the precise objective of this study.

Safety consistently ranked high in importance among participants of this study with an average score of 6.09. This was especially true among female subjects with the exception of one outlier who placed a value of just four on security while the other three candidates appointed safety with the scores of 10, 10 and 8. As for the men, excluding one participant's score of 3, the safety category received no less than a 5 from all other individuals. Aside from the two low scores, safety being considered of high importance is consistent with prior observations made in the literature review that when residing and undertaking employment abroad, participating

workers, or more specifically researchers in the case of this study, report that they need to feel safe and comfortable in order to produce effective results in their companies. This should be no different in the case of Brazilian professors taking on research projects at universities in a foreign country like the US as is consistently demonstrated, with the exception of two outliers, in the data presented in this study.

Continuing to the area of feeling comfort whilst living abroad, the category of social life was another high-ranking category among participants in this study which received generally very high scores. Given that Brazil is, culturally speaking, a very social country that tends to place a high value on social interaction and participation, this was not surprising. As was reported very consistently throughout the literature, those who live abroad place a high importance on their comfort and attribute positive and negative results of living abroad directly to whether or not the person is able to feel comfortable in their living environment. A great portion of this is related to their comfort in their work environment. However, at the same time, one does not spend most of their time working in most cases. In the case of a standard 40-hour workweek, for example, one generally spends eight hours, or a third of each weekday actually working. This figure because less than a third when considering that to complete this 40-hour work week in five days, one does not spend the weekends working. Even in the case that one spends 9-10 hours a day due to accounted breaks or lunchtime, the percent of one's time that is spent at their place of work is generally less than half of their total time throughout a given week. For this very reason, social life was an area of interest in this study in order to evaluate the overall comfort level that the subjects felt not only in their work environment. Thus, the first part of gathering this data required a measure of how important subjects considered this aspect. Results were consistent with suggestions from the literature that social life is potentially as much a factor in determining one's comfort while abroad as is comfort in their work environment in some cases.

Alimentation received generally modest scores across the board with the exception of one participant contributing the lowest score in the category of 2 and two participants indicating an importance level of 10. The relevance of this category in the context of this study is directly related to the issue of comfort, especially comfort as seen and measured in the adaptation process of each subject. Food and diet-related concerns were referenced in more than one article in the literature review of this study. Furthermore, in the arguably more fundamental phase of the literature in which a definition of culture for the purpose of conducting this study was sought, food was also mentioned as a fundamental point of being included in values and norms

of people throughout different cultures as it very much defines them. In consulting these articles and finding such concerns with food and diet, and also considering how fundamental food is to the definition of culture, this study attempted to include this as a valuable part of the analysis in determining the level of influence food has in the context of international projects.

Like most of the other categories, diet and available types of food can vary depending on location within the US. Thus, it is worth considering that this could have influenced each participant's response in this particular category. Likewise, the variety of foods available and consumed more regularly differs among the different regions of Brazil so it is also important to consider that this factor also could have had an impact on the subject's level of concern with the given category. In any case, the data of this study was not overly suggestive of any strong correlations among Brazilians living in the US. The two highest scores (both of 10) came from female participants. This suggests that in terms of preparation for Brazilians, and potentially other nationalities around the globe, perhaps food can be more of a concern for women than it would be for men.

Participants of the study varied in their responses regarding the importance of climate. All but two responses were indicative of climate being a 5 or higher. The only exceptions to this were one participant giving a 3 to this category while another participant gave an even lower score of 2. Contrary to this was the high score of 9 given by just one participant. Climate fits into the adaptation and comfort realm in terms of why it was included on the survey and to what extent it was analyzed. Region is of particular importance in the analysis of climate as this varies throughout the US. Also important to consider is the difference of climate in each of the four seasons, something of which the intensity can also vary drastically depending on the region. For example, the lowest score of 2 came from a participant that lived in Texas which is a place known for its hot weather, similar to that of Itajubá which is not only the city home to UNIFEI in this case but also the home city of this particular participant. The highest score came from a subject who participated in international research in Indiana and Massachusetts, both of which, although known to have warm summers, are more known for their brutally cold winters. This response is suggestive that the level of importance related to climate tends to have a correlation with the specific part of the US where they resided. Giving additional support to this analysis is the fact that the two participants with the second highest score of 8, were also in cities that are part of regions known for having extremely cold winters staying in Troy, New York and State College, Pennsylvania. Further supporting this are the two candidates that indicated a score of 7, the third highest score, for the importance of climate. The first of these

participants also stayed in Troy, New York. The second, however, spent their first experience in the US in the southern state of Georgia, a state known for a warm and humid climate. This is something not unheard of in in neither Sao Paulo, the home state of this participant, nor in Itajubá, home of UNIFEI where the participant currently resides. However, in their second experience in the US, this particular participant stayed in the state of Wisconsin, which is another state known for its brutally cold winters of sub-zero temperatures both when measured in Celsius as well as Fahrenheit.

All in all, the data was for the most part consistent with the notion that region of stay within the US was a determining factor as there was a correlation throughout the results between colder regions in the US as the participant's place of residence and a higher score given in this category. One particular response that can be interpreted as an exception to this supposition, was the participant that indicated the second lowest score of 3. This subject resided twice in the state of Michigan, a state which despite having a mild-warm climate most of the of the year round, is also known to have cold, snowy winters. Thus, this could be viewed as an exception to the aforementioned correlation between higher scores and colder places of residence. Still, the majority of participants were consistent with this correlation in terms of what level of importance they placed on the category of climate.

Politics and bureaucracy scores ranged from a low of 2 and a high of 9 while 6 was the most frequent score appearing 4 times while a score of 5 appeared three times resulting in an average of 5.18. The two highest scores of 9 and 7 were both given by female participants and the lowest score was given by a male suggesting that women tend to place a higher importance on this category. With the exception of one female participant indicating a 3 in this category, no other women gave this category a score of less than 6. As political influence and policies can vary greatly depending on the presidency at the time each participant spent in the US, it is also worth analyzing this data for patterns suggestive of correlations between the time and political situation current to that time. The female participant that gave this score a 3, for example, was the only female participant to have spent time in the US during a presidency of the Democratic Party. This particular participant did research in the US for the first time during Clinton's Presidency in the 1990s and for the second time during the Obama Administration. During both of these Presidential Administrations, national and international security measures along with bureaucracy for foreigners and immigrants were at a relatively lower point when compared to the Republican Presidencies in recent times of both Trump and Bush. The highest score from female candidates came from a participant who has conducted research in the US

since the Trump Administration has taken office. Trump's Presidency, being widespread in international news and media as a racist and misogynist Administration, could indeed have everything to do with this.

In the category of laws and rules, three participants indicated a score of 9 while four more gave a score of 8 and one marked a 7 in regard to the importance of this aspect. These high scores were a mix of both male and female candidates leaving no definite indication that one sex considered this category more important than the other. With the exception of the low score of 1, no single participant gave a score of less than 5 in this category, resulting in an overall average of 6.73. Being that this is one of the highest averages among the nine categories, it can be seen that Brazilians generally place a high level of importance on the category of laws and rules. Another interesting point that was brought up in the open-ended question part corresponding with the numeric value section was the difference in laws related to buying and possessing alcoholic beverages. One participant pointed out that their main concern with the category of laws and rules was directly related to the strict laws about purchasing alcohol and being outside of an enclosed building (*i.e.* house, restaurant, bar, or other public establishment) with an open container of alcohol, which is illegal in the US. Not only does this differ in written legislation from Brazil where walking in the streets with an open container is completely legal and regularly practiced, but it is also a law that is strictly upheld by law enforcement officials throughout the US along with all other alcohol-related laws that differ from those of Brazil. This brings to light a good point that was observed in the literature which is that in order to be comfortable and avoid legal problems in a foreign country, one must first know the laws of that country. Further considering this point, it is actually no surprise whatsoever that the Brazilians in this study placed a high importance level on the category of Legislation and Rules as this is essential to living comfortably and successfully in any part of the world where one must become accustomed to new norms and laws. In a similar way to how social-life norms and differences come into play in influencing one's time spent on projects carried out in a country outside of their own, so too do legislation and rules have an impact in shaping the experiences of a person outside of their own country where they must first adapt to new standards on several levels.

4.3 - WORK-RELATED INFLUENCE FACTORS

Similar to the adaption factors section where each participant was asked to place a numeric value on what they considered the level of importance for each of the areas, the work-

related factors of influence section also measured six unique aspects of the work atmosphere and work life by means of a numeric assessment. In this section, importance of each category was not measured but rather each participant was asked to rate how good or bad they felt this area was in their experience doing research in the US. Figure 12 is for the purpose of comparing the scores given by each participant, 0 signifies that the participant felt that this area was not effective to some degree or that they were displeased by the overall condition and or conduct in this area, while 10 means that the participant was very pleased with their experience in the given area giving it the maximum value possible.

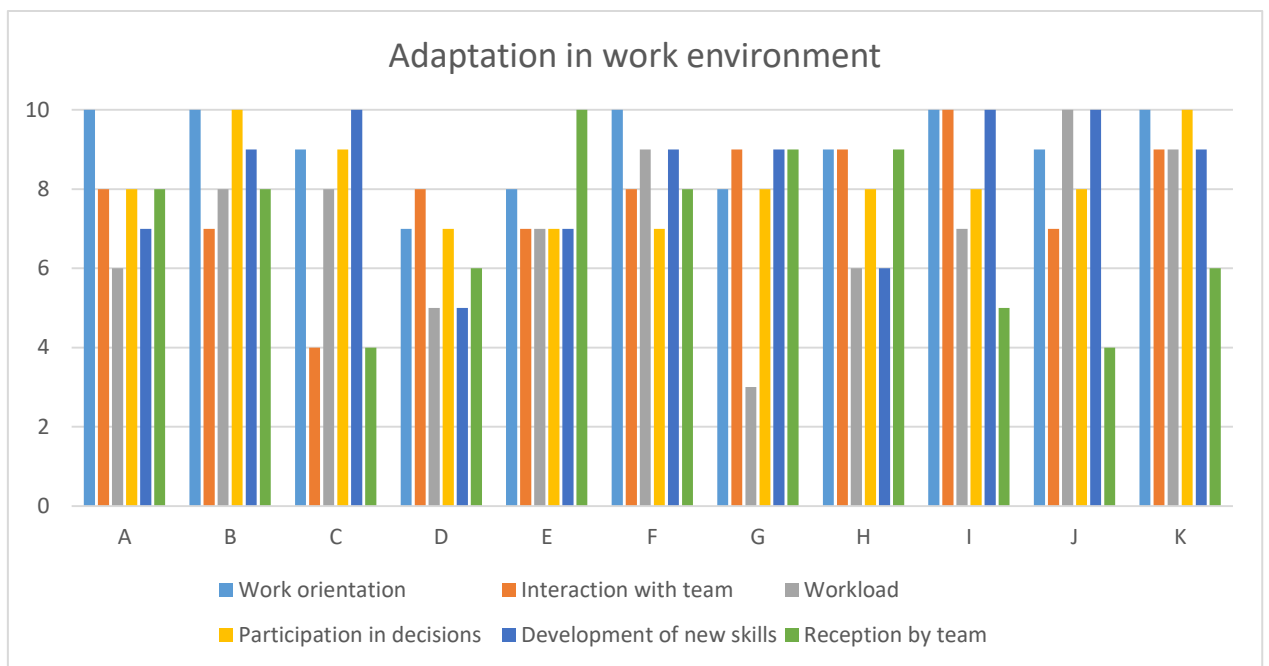


Figure 12 - Adaptation graph related to work environment.

The six different categories measured that are related to the work atmosphere and work life were the following: 1) orientation of work/assignment; 2) workload - amount of hours worked/expected to work; 3) development of new abilities; 4) interaction with work team; 5) participation in decision-making process; and 6) reception by the team and colleagues. These categories were specifically thought out and selected in order to create a profile of what each participant felt about their experiences abroad in terms of their work life. Categories such as participation in decisions and reception and interaction with the team were designed to better understand the involvement and participation of each participant in their work environment, whereas orientation and workload categories were selected to gauge the professional side of expectations and productivity in each case. Finally, the development of new abilities measures

both of these aspects and is a final means of determining how well the participant felt that they were able to grow from the experience and gain new skills that they see as professional development in their careers as researchers. As is true about the previous numeric evaluation, this assessment will also be further contextualized in the next section, which analyzes open-ended responses given by each participant about these particular areas. This is especially important as things like workload, participation and interaction with one's team can be relative assessments depending on the participant's situation as a professor and researcher in Brazil.

With the exception of one score of 3 and another of 5, workload scored consistently high among all participants with scores ranging from 6-10 and an overall average of 7.09 (Figure 13). As will be seen in more detail in the open-ended question section, many of the participants felt that their workload was pretty standard and that it was comparable to what they experienced in Brazil, making this aspect an easy adjustment (if any adjustment at all). Some participants also commented about the fact that their workload was left for them to decide and that they did not necessarily have a required minimum number of hours, but rather a set of expectations in terms of what was to be achieved. As far as how those expectations were met was for them to manage on their own. Generally, this aspect was reflected on as a positive characteristic of the participants' experiences in the US but as will also be seen in the open-ended comments, at least one subject felt that this lack of structure was not as beneficial, and did not necessarily lead them to obtain the results that they sought. In the literature, it was observed that structure and/or lack of structure relative to one's customary working style can cause a disruption in one's working habits, thus creating a less productive work environment for the individual. For this reason, such a question was placed on this survey with the intention of seeing if this aspect had an effect in the case of Brazilians doing research in the US. Seemingly, there is evidence that for some that are more accustomed to a more structured work environment, this can in fact influence their productivity in a negative manner. However, what seemed to hold true more consistently was the idea that in the case of Brazilians, a more open and "free-to-choose" workload and work schedule allowed the researchers to structure their own schedule and become increasingly more productive.

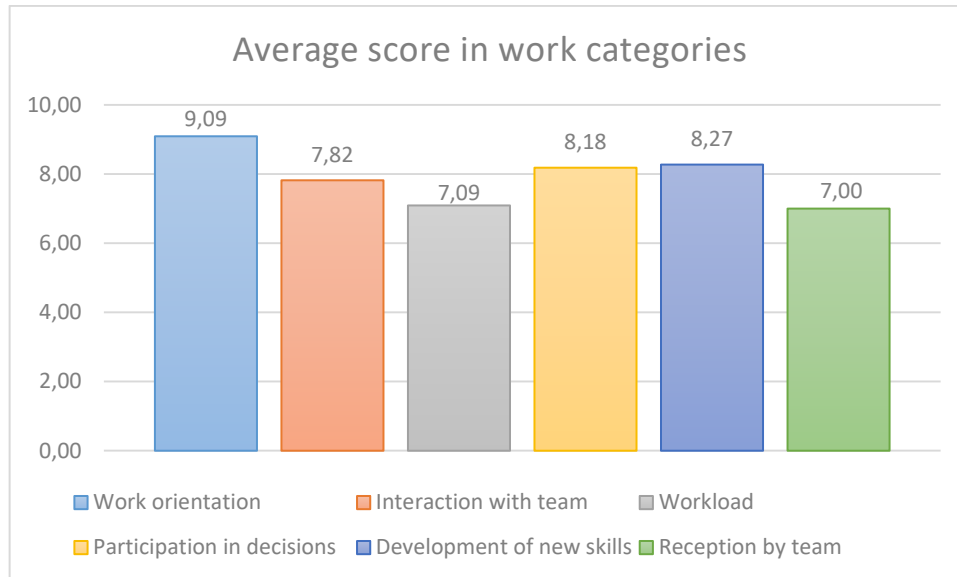


Figure 13 - Adaptation graph related to work environment showing the average for the categories.

Interaction with the team was a category that generally received high scores, but at the same time, received more than one score below 5. Based on the open-ended questions that supplement this information, this seemed to be directly connected to the freer work schedules and liberty that participants had in choosing their own hours and being solely responsible for managing the progress of their work. Thus, it can be noted that along with the benefits of a more autonomous work schedule and freer structure of work, comes the potential cost of social interaction within the team members. The lower scores received in this section draw attention to the fact that in the case of at least some Brazilians, this was something that lacked, or in some way affected their work dynamic and atmosphere. Perhaps in this case, being used to a more interactive team as opposed to a work environment structured and focused on independent and individual work was an aspect that Brazilians did not necessarily anticipate having to adapt to. However, at the same time as having some critical feedback in this area, most of the participants gave the category a score above 7, suggesting that the overall experiences were generally positive in this area. Still, these low scores cannot be over looked as the point of this research is to identify such gaps in order to work toward improving them in the future.

In the participation in decision-making category, participants showed favorable, positive results with scores ranging from a low of 7 to a high of 10 and an overall average of 8.18. As discussed above, the participants of this study did not always feel that they had the best interaction with their work teams on an everyday social level. However, the positive results

in the participation in decision-making category demonstrated that Brazilians were encouraged to participate and did have an opportunity to participate and interact with their team on more professional matters such as making group decisions about the research and projects in which the team was involved on a group level. Perhaps this is also related to the general difference in work habits and structures of respective work environments. As will be discussed in the open-ended discussions, more than one participant related their satisfaction in the decision-making category to a reference of having less bureaucracy and levels of authority through which to pass in their work environments in the US than they were used to having in Brazil. They also gave feedback about feeling that group decisions were more participatory, and in turn, more reflective of the group's input as a whole.

Orientation for work was a category that received a low score of 7 with all other participants indicating a value between 8 and 10 in this category. Overall, this demonstrates satisfaction among the participants of this study and demonstrates that the orientation process for their work was effective. As seen throughout other areas measured in this study related to both social life and the work atmosphere, there seems to have been a theme of communication and interaction in general with American counterparts as being much more direct, professional and not necessarily as friendly or warm. Perhaps in the case of orientation, this is also true and consistent with this tendency. At any rate, this result is significant in demonstrating the importance of communication in the work place and especially so in the case of being oriented in a new work environment. This also is consistent with findings in the literature that feeling comfortable and having a clear understanding of one's work assignments and responsibilities is essential to one's ability to produce effective results.

In the area of reception by one's team, not all participants gave such high marks. Two scores of 4 were seen in this category along with one score of 5. The two scores of 4 came from one male and one female giving no strong indication that one sex was more dissatisfied in this area than the other. Likewise, the rest of the scores ranging from 6 to 10 were mixed in terms of the sex that indicated them furthering the aforementioned notion. In this area, as can be seen in the open-ended questions part of the survey, participants seemed to express that they felt a lack of reception in terms of friendliness and extension of openness to them. This again furthers previously referenced ideas about Americans having a tendency to be more purely professional in the work place and not as friendly necessarily as they have more of a "work time is for working" attitude. Brazilians, on the other hand, seem to have a tendency of expecting more

friendliness and warmth in the work place as this is culturally more appropriate and also more common in Brazil.

With the exception of one score of 5 and another of 6, the development of new abilities category received scores ranging from 7 to 10 giving it an overall positive outcome. In the context of this research, this demonstrates that there is a lot to be gained from international work being performed all over the world. As work orientation results were positive in this survey as well, it is suggestive that work orientation in the host country is a vital aspect that allows for participants to maximize the potential of what can be gained from their experience overseas. Further relating the results of this category to the outcome of other categories, it can also be suggested that things like more autonomy in the work place and more participation in the decision-making process encourage skill development as these could be new areas where participants have more room to grow when they are given the chance. In the case of having autonomy in the work place, some participants commented in the open-ended questions section that they felt growth in this particular area, in that they were forced to be more organized and responsible in managing their own research projects. Likewise, having more influence in the decision-making process encouraged participants to develop more skills in areas such as communication and teamwork as was commented in the open-ended questions by some of the participants.

4.4 - OPEN-ENDED QUESTION DISCUSSION

In this section of the survey, each participant was given the opportunity to explain and contextualize their responses in the previous two sections (sections 3.2 and 3.3), where they gave a numeric value to different cultural aspects of their life abroad while in the US. Given a set of open-ended questions that corresponded with each of the previously discussed categories, the participants could write in detail to the extent that they felt necessary, describing how they felt about each of the given categories and give any additional examples or situations to shed light on why they gave the corresponding value in each particular category. Essentially, this was done to complement the quantitative data of this research in a way that is open to observing more specific insights and considerations about each individual and their overall experiences. As such, not all participants necessarily had much to say about every category. Rather, each participant seemed to focus on the areas and specific questions about which they felt they had the most to say and contextualize. In the analysis of this section, citations deemed most relevant

to the research have been taken from each participants' survey as a means of a deeper understanding into why such patterns arose in the numeric section of the survey. Furthermore, additional insight can be gained from some of these citations as particular details on a case by case basis can not necessarily be viewed in a purely numeric assessment.

Obviously, this comes as a consequence of the fact that each person's experience was different, and thus different aspects were more relevant or of interest to each particular person. However, at the same time, the open-ended question section of the survey allowed for this research to analyze particular areas in more detail as patterns were still found throughout the responses given by each participant. Some of these responses contextualized the patterns that were analyzed in the numeric assessment, while others showed further details about the overall experience of living in the US and specific details that can also be taken into consideration for the context and underlying goal of this research. This part of the analysis includes a case-by-case evaluation of each participant evaluating and interpreting the responses and citations that highlighted each of their overall experiences and gives a more detailed account of such experiences during their time abroad. It also gives a final analysis which contextualizes all of these responses in a grouped way, taking the patterns found throughout the responses into consideration along with the consistencies and inconsistencies among these responses.

4.4.1 Participant A

When asked about their English language ability and how well they were able to communicate, the participants' overall responses varied throughout all of the results. Through this analysis of the open-ended questions, it will be seen that there was a pattern connecting the participants' English communication ability to the aspect of their social life. In the case of Participant A, it was found that this person had trouble in English.

- Do/did you speak English when you participated in the research project? Did you have difficulty communicating?

"I spoke a little [English] and I found it difficult to communicate."

Although this participant did not say anything significant regarding their social life or anything that connects to the idea of communication being related to one's social life, she did demonstrate feeling isolated in the work place when asked what she liked and did not like about the environment of her workplace.

- What did you like about your work environment? What did you not like?

"I liked the commitment of people to their work and research. I did not really like the isolation of people in the workplace. "

What can also be gained from these responses is the indication of professionalism and dedication in the workplace of American counterparts. This too, as will be seen throughout the analysis of the open-ended question responses, was a pattern in the questionnaire results.

An additional pattern that can be derived from the data is related to the extent to which the participants received any type of orientation related to their work, the team with which they worked, and the ability to adapt their culture in the workplace. As can be observed in the responses of Participant A here, the participants consistently expressed that the orientation which they received was very minimal related to work and concerning the work team. Regarding orientation related to adapting their culture in the workplace, no participants made any mention of having received such guidance.

- When you arrived in your work environment in the host country, did you receive clear, objective guidance on how to do your job?

"I got some guidance, but not objectively on how to do my job."

- Were you advised on how to handle the local work team?

"I was not oriented in how to deal with the team."

- How were you oriented in how to adapt your culture in the workplace, including with staff (e.g. professors, students, technicians, secretaries...)?

"I was not geared to adapt my culture in the workplace."

Despite not receiving orientation related to adapting their culture and receiving little or no orientation related to work and their respective work teams, the participants of this study generally expressed satisfaction in being received by their work peers. They also consistently commented on the fact that colleagues in their respective universities were prepared to receive Brazilians since hosting foreigners is both common and standard practice. Participant A's response highlights such insight:

- Do you think that the work team was prepared to receive a member from another culture? How did you socialize with your work team?

"I think so; they get a lot of foreigners at the university. I socialized as well as possible without major problems. "

Participants were also asked about their overall observations and feedback regarding what they felt and perceived as the main differences between the cultures of Brazil and the US. As this is a very subjective question, a variety of responses commenting on different aspects were received from the various participants. Participant A's response gives insight to another pattern found in the data:

- What major cultural differences did you notice in your work environment in US and Brazilian universities?

"The main difference I have noticed so far has been the commitment of graduate students to their research projects, which is not always the case in Brazil."

The Brazilian participants of this study consistently demonstrated a general perception of their work atmosphere being more professionally focused. Although not mentioned by this participant, what will be seen in later responses is the fact that this was often times coupled with a less socially warm atmosphere for Brazilians. Thus, as a consequence what can be seen in the responses is a general pattern of more professionally-gearred American counterparts resulting in Brazilians feeling productivity and professional growth while sacrificing more in their social life both inside and outside of the workplace.

Often times, the Brazilian participants attributed this to their perception of Americans being more individualist and not necessarily as communal in their socializing. However, interestingly enough, the participants also expressed a general sense of professional aspects of life such as the work environment, methods of research and decision-making processes as being more collective in their respective American universities as Participant A points out here:

- Do you think that the environment that produced your research was more individualist or collective? Why?

"More collective, students and professors were always in touch at weekly meetings and always helping each other when needed."

4.4.2 Participant B

Participant B also expressed having difficulty with English, and likewise in being able to communicate effectively.

- Do/did you speak English when you participated in the research project? Did you have difficulty communicating?

"I did not speak [English] and I had normal difficulties."

In the case of Participant B, this deficit was not necessarily seen as a problem in terms of the social life aspect as no significant comments were made regarding a lack in this area.

- With regard to social culture, what were the points that you found most difficult?

"Learning a new culture has always been exciting. I loved the process. I did not find anything really complicated. The country functions well (USA and Spain). "

Also worth considering, however, is the fact that this participant had a family with whom he lived while in the US. In the case of participants that took their families to the US to live with while conducting their research, less concern was seen on the whole in the areas of social life and social activities.

Regarding religion, Participant B confirmed through the following open-ended response that the supposed notion of the numeric value assigned to religion being a zero, was related to the fact this participant identifies as atheist. In fact, what is interesting here is that the participant expresses having felt less religious pressure in the US than in Brazil. This can be connected to the literature review of this study in which it was found that feeling comfortable is essential for foreigners to be able to succeed in accomplishing productive work results while residing outside of their native country.

- What about religious culture, did you have any problems? What?

"No problems. Being an atheist, I felt less pressure in the United States than I do in Brazil. "

Participant B revealed that there was also no real orientation in the workplace but at the same time, this was not necessary as a plan of execution in the workplace had already been prepared before arriving in the US.

- When you arrived in your work environment in the host country, did you receive clear, objective guidance on how to do your job?

"I already had a well-defined plan of what to do and that made the process easier."

- How were you oriented in how to adapt your culture in the workplace, including with staff (e.g. professors, students, technicians, secretaries...)?

"This was not done and there was no need. I remember some basic tips: Do not use pirated software / Do not smoke in closed places. "

In determining the impact of culture, one positive aspect to this participant was having less competition in the workplace.

- What did you like about your work environment?

"There is no competition and the researchers are exceptionally humble and friendly."

What is suggested by this comment is that reducing the amount of competition in turn reduces the pressure on researchers to finish their work faster. Thus, they can focus more on the quality of their work which can make for more effective results. Another positive effect that culture had in the context of Brazilians doing research in the US that was consistently mentioned throughout the responses of the open-ended question section of the survey, was related to the flexibility of the workload and distribution of time spent in the workplace.

- Do you think the workload was adequate? Why?

"Extremely flexible for PhD and postdoc."

Also seen throughout the results of this part of the survey was the general notion that there was more collaboration in the workplace, especially related to making decisions as groups.

- Do you think that as a foreigner, you participated in the decision-making process regarding the research project?

"I was always consulted in group research and set the course for my own research."

A second comment that demonstrates such an attitude of this participant is the following:

- Do you think that the environment that produced your research was more individualist or collective? Why?

"Very collective and collaborative. We wrote articles together. "

Interestingly enough, many of the participants commented that they felt that, socially speaking, Americans were more individualist and Brazilians more collective, especially regarding socializing in the workplace. However, these comments seen in Participant B's responses about the more collective work practices in the decision-making process and having the autonomy to choose one's hours and make more independent decisions regarding their own projects were not unique or rare when compared to the responses given by the other participants. As gathered in the literature review, social isolation can have a detrimental effect on people while living abroad. This is an important aspect to consider in the context of this study since the point is to highlight the influence of culture. However, at the same time, it can be seen that in other ways, autonomy and being independent in the workplace can also have a positive effect on productivity in the case of Brazilians conducting research in the US. Perhaps what is important for future considerations is that balancing these aspects is important. In other words, in order to better deal with the social differences, Brazilians should find ways to better prepare for this aspect of American culture.

A question related to skill development was included on the survey in order to gain insight into what ways, if any, these cultural differences were having an impact for the better. This was also included to see if the participants felt growth in their professional lives in spite of the differences in social life and at times social isolation even in the workplace.

- What new skills or knowledge do you consider to have developed after your exchange?

"Ability to communicate, trust and better understand the scientific method."

In the case of Participant B, the ability to communicate was a positive result, which comes as no surprise since this participant also mentioned this being a weak point going into the experience. The other skills mentioned can potentially be attributed to the aspects mentioned in the following question regarding differences between the respective cultures.

- What major cultural differences did you notice in your work environment in US and Brazilian universities?

"We are very similar on average but the extremes are very different. The best Americans are much better than the best Brazilians. There is an abundance of resources in the United States and bureaucracy is less related to professors. The existence of a range of nationalities in university settings is something we do not have in Brazil. "

As was also thematic in the open-ended question responses, the access to more resources here could very well have contributed to the skills developed by Participant B that were mentioned above. Likewise, the mention of less bureaucracy in the workplace for professors could also be a contributing factor as it allows for less distraction and more focus on one's work or research.

4.4.3 Participant C

Similar to what Participant B reported regarding difficulty with language, so too did Participant C express difficulty in being able to communicate due to not having a strong command of English.

- Do/did you speak English when you participated in the research project? Did you have difficulty communicating?

"I did not speak [English] and I had difficulties."

What was also found in this participant's responses was that they found it difficult to adjust to the social aspects of life.

- With regard to social culture, what were the points that you found most difficult?

"To know and adapt to the habits of social life."

As mentioned before, there was a pattern between difficulty with language and difficulty with social adjustment. However, as has been and will be seen in other responses, this is also related to the difference in social dynamics and the fact that the Brazilian participants felt that their American counterparts did not necessarily practice as much open social interaction in the workplace as they were used to experiencing in Brazil.

- Do you think that the work team was prepared to receive a member from another culture? How did you socialize with your work team?

"Partial socialization only in annual festive meetings."

Being that this participant indicated the highest score (10) when asked about the importance of religion, special attention was given to the corresponding open-ended question response. However, this participant gave no indication that there was any difficulty in adapting religiously while in the US or that there were any problems related to this particular aspect during the experience.

- What about religious culture, did you have any problems? What?

"No."

Participant C also showed that no attention was given to orientation in the workplace that was specifically related to how to adapt culturally; a response common among the participants of this study.

- How were you oriented in how to adapt your culture in the workplace, including with staff (*e.g.* professors, students, technicians, secretaries...)?

"No."

Also consistent in the findings of the study, which can be seen in the following response of Participant C, is the high level of participation in the decision-making process that Brazilians felt during their experiences in the US.

- Do you think that as a foreigner, you participated in the decision-making process regarding the research project?

"Yes."

When asked about what he particularly liked and did not like about his work atmosphere, Participant C gave responses that were indicative of the general insight gained from this study that Americans tend to be more strictly professional in the workplace while not necessarily focusing as much on social interaction.

- What did you like about your work environment?

"People focused on their work."

- What did you not like?

"Less interaction after class."

Both responses here are very consistent with the aforementioned idea about American behavior and social practice in the workplace. Further responses from this participant also give insight to this idea.

- What major cultural differences did you notice in your work environment in US and Brazilian universities?

"US: more reserved people during work and very rare social activities after work. Brazil: More spontaneous and more festive people. "

Here, the participant goes so far as to use the word “reserved” in describing Americans in the context of their social behavior in the workplace. This specific comment is important in helping show how the experience was viewed from the Brazilian participant. However, the following comment should also be considered in order to further contextualize these reactions and observations.

- Do you think that the environment that produced your research was more individualist or collective? Why?

"Individualist. I was the only researcher in my research area. "

As previously mentioned, the general point of view of the Brazilian participants of this study was revealed as seeing Americans as more individualist in terms of social interaction in the workplace. In the case of this particular participant, perhaps the fact that he was the only researcher in his area made this aspect increasingly difficult to deal with. Nevertheless, the observations given regarding less social activities throughout the year and less interaction after classes, does demonstrate that the social dynamic was comparably less interactive on the whole for the Brazilian participants.

4.4.4 Participant D

In the case of Participant D, it can be seen that attention was given to certain details such as alimentation and religion. These are pretty simple and standard considerations that reflect this participant’s attention to these aspects of the process and experience.

"Alimentation: it's not a very critical factor, especially in today's globalized world."

"Religion: It can be a problem in specific places with a more conservative tradition."

More attention was given, however, to the aspect of communication in which this participant expressed more specific reasons as to why this is essential in the work place and in working with other people.

"Communication: not communicating can be very disruptive to adaptation."

- Did you have difficulty communicating?

"No."

- What do you consider the most difficult thing about communicating?

"Dealing with the expectations of others."

- Did you have any contact (holiday, friends, university visit, *etc.*) with the host country prior to actual participation (travel) in the research project?

"Yes. I was in the US when I was young."

At the same time as expressing such concerns about communication and the motives for this aspect being particularly important regarding living abroad, this participant communicated that they did not feel any difficulty in this area due to having previously lived in the US when they were younger.

Consistent with the results from the questionnaires of the other participants of this study, Participant D reported no such orientation regarding how to adapt their culture in the work place, nor was any orientation given in regard to how to deal with the work team.

- How were you advised on how to handle the local work team?

"I did not hear anything about that."

- How were you guided in how to adapt your culture in the workplace?

"I did not hear anything about that."

Part of the reason that this question was included on the survey, was to measure if there is something that can be done on the end of American universities in order to better receive foreign researchers and improve work productivity. Therefore, in order to contextualize this information, it is necessary to connect this to what was reported by the participant regarding how they felt about their team's preparation in receiving them.

- Do you think that the work team was prepared to receive a member from another culture?

"Yes, the environment has always been multicultural."

In both the case of this participant and the case of many of the other researchers, it seems that not having been oriented in their work, nor in how to adapt their culture, was not problematic. As pointed out here, and by other participants as well, this aspect of preparation

does not seem to generally be a problem as American universities are seemingly well accustomed to hosting researchers from all points of the globe. Nonetheless, it is a point of consideration for American universities to think about improving in this aspect in order to make their foreign researchers more comfortable and secure in having clearly communicated expectations since these aspects were highlighted in the literature as being determiners of success for foreign workers and researchers.

In terms of measuring the overall effects that these experiences are having on the participants, this participant, similar to several others, expressed growth in their academic professional area.

- What did you like about your work environment?

"[It was an] instigating academic environment."

This part of the questionnaire and its results ended up pointing out that, among other cultural influences at play in this experience, professional growth was achieved due to the stimulating academic environment that the Brazilian participants experienced whilst conducting their research in the US. At the same time, however, it can be observed through the following comment that perhaps certain procedures or different practices can create pressure that do not contribute to more productive results:

- What did you not like?

"In some moments there were very tight deadlines."

Although there is no further or specific indication that this inhibited productivity, the fact that this participant felt that deadlines were sometimes too tight, does suggest the possibility that they did not always achieve anticipated or effective results as desired, due to the pressure of the deadlines.

As has been the tendency in the results of this study, this participant also expressed that they had the autonomy to make their own decisions related to their own projects.

- Do you think that as a foreigner, you participated in the decision-making process regarding the research project?

"In the projects where I worked, no, because I was contracted a posteriori. But in the projects that I participated as an author, yes."

Moreover, the participant had interesting and relevant comments related to the general differences that they felt between the cultures of Brazil and the US:

- What major cultural differences did you notice in your work environment in US and Brazilian universities?

"Freedom to perform important research tasks, low level of bureaucracy for trivial processes for the progress of research. In general, the Brazilian culture assumes that the researcher will do something wrong and therefore the bureaucratic procedures are usually made to curb the maximum of possibilities. It presupposes that a person will perform their work in the best possible way."

These observations reveal one possible contributing explanation as to why Brazilian researchers in this study tended to show professional growth. In the same way that the researchers expressed positive remarks about the autonomy they had in the work place, so too does this insight reveal such positivity regarding the reduced amount of bureaucracy involved in executing their projects while in the US suggest that researchers are allowed to work more effectively and achieve the sought-after results in their given research projects.

Not as consistent with what was reported by several other participants, was the aspect of participating in the community's social activities. Unlike the many other participants that expressed dissatisfaction in this area due to feeling isolated or disconnected from their peers outside of the workplace, Participant D demonstrated being involved in their community and being satisfied in this aspect of their social life as a result.

- How was your relationship outside of the workplace?

"Good. I participated in community activities"

Such an indication could be related to the fact that this participant also expressed no problems in communicating as they had previously lived in the US. Therefore, perhaps it can be inferred that the better one's language skills are and the less difficulty they feel in communicating, are also inherently connected to their ability to relate to others and participate in the community's social life while living in a foreign country.

4.4.5 Participant E

Participant E expressed difficulty in communicating and specifically noted that he felt that this was due to a lack of vocabulary in his day-to-day life. When asked further questions related to communication, this particular participant said that he considered communication to be the most fundamental aspect in terms of surviving and succeeding in a foreign country. He also related this to his social life commenting that socializing was important, as it was an opportunity to grow in the area of language and communication and reduce the feeling of missing one's family. Admittedly, this participant said that making too many Brazilian friends limited growth in this particular area as it fulfilled social life necessities, but in a way that did not allow him to socialize and grow more in English or in more American cultural settings. This is worth observing as it was found in the literature that culture is defined by values and practices of a given community or group of people. Thus, in spending more time within one's comfort zone, amongst Brazilians instead of Americans in this case, one can limit their access and interaction with a new group or culture.

Further connecting this to the literature, it was mentioned that in order to succeed abroad, finding the correct balance with one's native culture and the culture into which they become immersed, is essential. This is because such a balance is what maintains the mental health of familiar things from a person's native culture with the new everyday experiences of which they are now a part. Perhaps the most interesting comment this participant made regarding communication, however, was the following:

"Communication: The most fundamental. Non-communication breeds barriers; you avoid exposing your thoughts, going places, being isolated. "

In dealing with communication issues, it is important to remember exactly what this participant commented, that not being able to communicate generates barriers and ultimately leads a person to hold a lot of their thoughts in. This, in turn, can lead to less productivity and also a worse emotional well-being. Communication is important on many levels when it comes to the working environment and ability to produce effective results.

- Did you have difficulty communicating?

"A lot of difficulty."

- What do you consider the most difficult thing about communicating?

"Lack of day-to-day vocabulary. Social networking: Important, especially to break the language barrier and improve learning, and reduce the shortage of family and friends. "

"Regarding family distance, it's important, but factors like Skype, and the new digital age made it easier."; "My problem was making friends with other Brazilians. This impaired my social co-existence with other Americans."

Regarding the general work atmosphere and specific aspects of the work aspect of expat life, Participant E made several comments themed around the generally more open work environment in which he conducted his research while in the US. As is consistent throughout many of the responses received in the open-ended question part of the survey, this participant mentioned that no specific orientation was given in regards to how he should adapt his culture in the workplace. Also common in other responses was the mention of how the team of researchers was comprised of people from countries all over the world. Such observations give the impression that because university researchers in the US come from various cultural backgrounds all over the world, there is probably no consideration given to the area of adapting one's culture in the work place as these individuals are most likely expected to come prepared to do this on their own.

- How were you advised on how to handle the local work team?

"Very minimally, there were researchers from various countries. Just use common sense, silence and organization."

- How were you oriented in how to adapt your culture in the workplace?

"No guidance."

Specifically related to the workload and work schedule, this participant affirmed another commonality seen in the data of this research, which is that researchers in US universities tend to be given flexibility in their work schedules. However, as mentioned by this participant, free work hours did not mean that there was no expectation to get work done and produce results.

- Do you think the workload was adequate? Why?

"Yes, work hours could be chosen freely. I had no obligation regarding schedule, just responsibilities. "

A similar observation was made by this participant in regard to how the money invested in the project was managed and used in the project. Such data supports conclusions taken from the literature review of this research that flexibility and autonomy can increase work results and further the productivity of workers, or researchers in this case.

"Project money is more free and manageable by the professor who manages the project. In Brazil the project money is left in the hands of some bureaucratic organ that hinders and delays the entire research process."

When asked about the overall impact that the international experience had on the person's professional life, participant E highlighted that his general overview and the way at which he looks at science and his profession was increased along with general knowledge of how such matters are viewed outside of his native Brazil. One additional takeaway was the mentality that if certain aspects of how work are managed and conducted in a more efficient way, or what he considers to be a more effective way, then those methods and applications can also be used in the work environment in Brazil in order to increase productivity and efficiency. The participant further commented that this is especially true because he saw that Brazilians were respected overseas by other researchers of different nationalities, and thus they can continue to grow in order to maintain that respect, mutual growth and reputation with the world.

- What impacts (positive and negative) did the exchange bring to your professional life?

"An overview of how science is practiced outside of the country. How financial resources are managed overseas and here. It showed that in Brazil, it is also possible to conduct high-level research, and that we are respected abroad. I saw the respect with which all kind of work is handled, from basic undergraduate to postdoctoral research. "

- Do you have any compliments or complaints about the work environment? What are they?

"Adequate, favorable environment, with all of the necessary resources to carry out my research."

- What did you like about your work environment?

"The conduct of how the professor organized and kept the group working and focused."

4.4.6 Participant F

With Participant F, it can be seen that language and communication was difficult in general, but especially so in the first month. Interestingly enough, this participant gave a numeric value of 10 on the rubric assessment showing that they were in fact concerned with this difficulty.

- Do/did you speak English when you participated in the research project? Did you have difficulty communicating?

"I spoke very little [English]. Yes, I experienced communication difficulties in the first month. "

Furthermore, this participant gives indication that communication, and being able to communicate in the *de facto* language of a given place – English in this case – is important not only for communication in and of itself, but also in that it affects other facets of adaption such as social life as mentioned here:

- With regard to social culture, what were the points that you found most difficult?

"The social co-existence is more difficult when you do not know people, their habits or their language. It takes a great deal of time to build friendships and to increase socializing with people."

In addition to observations about the language difference, here it can be observed that individual habits of the people of a culture other than one's own can also prolong the process of social adaptation and interaction. This connects directly to the literature revision of this project as it was seen in the analysis of defining culture, that habits are essential to distinguishing cultures and what gives cultures their prominent characteristics that make them unique from other cultures.

When asked what they liked and did not like about their work atmosphere, Participant F gave responses that were suggestive of being more content with their overall professional experience more so in the mode of operations that they were with the social interaction aspect of their everyday work life.

- What did you like about your work environment?

"Infrastructure."

- What did you not like?

"Individualism."

The fact that this participant commented positively about the infrastructure of their work environment, demonstrates that their professional experience working in the US was satisfactory at least in this regard. However, the mention of not liking the individualism, suggests that this cultural difference made for a more difficult transition in regard to this aspect, a notion consistent throughout this study and reflective of the literature in showing that individualism and collectivism are essential components of cultural difference. Individualism being mentioned specifically in the context of the work atmosphere here is also demonstrative of the idea that Americans tend to be more professional in the workplace and not necessarily as social in the same way that Brazilians tend to be with their everyday interactions in the workplace. An additional comment from this participant also gives insight into how the social interaction can take more time and be difficult for someone coming from a more social and collect culture such as that of Brazil and then living in a more individualist society like that of the US:

- How was your social life outside of the workplace?

"I have not been able to establish friends outside of the work environment since I have only been in the U.S. for 1 ½ months."

Although this participant points out that they had only been in the US for a month and a half at the time of giving this response, this quote can still be taken as an indication that the social adaptation process is, at times, slow and can be frustrating for certain people.

3.4.7 Participant G

Consistent with other participants' responses, Participant G points out that communication and learning, or adapting to a new language, can be a challenge during the initial part of living in a foreign country.

"Communication is a challenge in the beginning, but it is part of the immersion process."

Additionally, interesting commentary about the climate factor was included in this participant's open-ended discussion:

"Climate: Particularly important for countries that have rigorous winter. People from countries in the southern hemisphere often go through depressive processes in the winter of the northern hemisphere, mainly due to the short period of lighting and the adjustments of biological clock."

Here the concern for depression and mental well-being is expressed for those from the Southern Hemisphere in terms of having to adapt to a much colder climate of the Northern Hemispheres. Although there is some geographical inconsistency in this observation (both examples of cold climates in the Southern Hemisphere as well as examples of warm climates in the Northern Hemisphere can be found), the proposed idea is valid that climate adjustment for individuals can be severe and especially so in the event that a person is coming from a warm climate and having to adjust to a colder climate. As mentioned by this participant, depression and other effects can be a result of colder weather. Even for people native to colder regions of the world, this can be true as there is a higher depression and suicide rate among colder countries in the world.

As mentioned by several other participants, social contact, both locally and with one's family, was considered important for this participant. Specifically, this particular individual points out that the lack of such contact can influence the overall work process and rate at which it is executed – or at least this was the case for them – and a suggestion is given that as Brazilians tend to be more affectionate, a plan should be made to maintain contact with their families while abroad.

"Social life: distance from one's culture, climate, and family can hinder the progress of the project. That is why social networking should be established in the host country so that some non-professional ties are created."

"Family distance: Planning is necessary due to the time of absence away from the family. In general, Brazilians are more affectionate and attached to the nuclear family than Americans and Europeans."

In the case of this participant, contact and frequent communication was maintained throughout their time in the US as can be understood through the following comment:

- How did you deal with distance from family and friends in Brazil (in cases where the family did not go together)?

"Daily conversations via the online tools available at the time, and many emails."

In addition to the mention of distance from one's family and potential ways of dealing with such adjustments and potential difficulties, this participant points out that having contact with people from one's own country can also facilitate their social life adaptation and potential difficulties.

- How was your relationship outside of the workplace?

"I did an internship abroad at the same time as my husband, who was doing the doctorate sandwich program. In addition, the Boston area is known to be the second largest region of Brazilian immigrants [in the US] so, in this way, social interaction was relatively similar to that of Brazil; my family came to visit me once after six months of my internship. These factors undoubtedly made my work much easier."

As seen in this quote, this participant felt that the adaptation process was facilitated greatly due to being in a region of the US where there are already many Brazilians. Not only did this affect the social life aspect of their life, but this participant goes so far as to say that it most certainly helped in their work as well. As for most of the rest of the participants of this study, such a demographical convenience was not necessarily the case. Demographically speaking, the majority of the US does not have significant Brazilian populations living throughout its various regions. However, as was seen with another participant, such a social dynamic can also impede language acquisition in the case that an individual does not allow themselves enough time away from their familiar community.

Regarding the work atmosphere and this participant's work life in general, it can be perceived that the professional part of living abroad was generally positive. The following comment reflects on this participant's satisfaction with the work equipment and general facilities.

- Do you have any compliments or complaints about the work environment? What are they?

"The work environment I had at MIT as a postdoc is far superior in terms of infrastructure, thermal comfort, IT equipment than I have today at UNIFEI as a professor, and I find the work environment here very good compared to other Brazilian HEIs."

Throughout the responses of the candidates in this study, it seems very coherent among the participants studied that things like professional infrastructure and equipment were not lacking at their respective facilities and work environments in the US. However, what seemed

to be lacking is the social reception in some cases. This was the direction that all of the participants took when responding to the questions about the reception of their teams. Thus, it seems that on a professional level in terms of equipment and infrastructure provided, universities in the US are well-equipped and ready to receive people from all over the world in this way. However, at the same time, they are not necessarily accustomed to being especially social and receptive on a more personal level as there was no mention of any such culture-related orientation in any of the participants' responses.

- How were you oriented in how to adapt your culture in the workplace?

"There was no restriction, no behavior, or even laboratory safety clothing."

Moreover, a common theme throughout these responses, is the fact that Americans tend to maintain a more professional stance in the workplace, as opposed to being more social and friendly like the Brazilian researchers of this study are used to in their work environments in Brazil.

In addition to their adequate infrastructure and equipment, American counterparts involved in this study did show a particularly positive ability of granting more autonomy in the workplace to their Brazilian guest researchers as seen here:

- Do you think that as a foreigner, you participated in the decision-making process regarding the research project?

"As answered above, as the research grant was Brazilian, and I went to a postdoctoral stage, I had a lot of autonomy to make decisions in the course of project development."

Such autonomy in the workplace is another commonality among the responses received from the Brazilian participants of this study. In fact, several participants made a point of mentioning that the autonomy they had in their US projects was more than they were generally used to in Brazil due to reasons such as bureaucracy and simply culture-related systems of operations and hierarchies in place.

As a final attempt to measure how the Brazilian participants of this study felt about their experience, and also as an attempt to gauge their perception of the experience in terms of what could have possibly influenced their everyday life and work, the professors were asked what they noticed to be the main cultural differences between the US and Brazil. When asked this question, Participant G gave the following response:

- What major cultural differences did you notice in your work environment in US and Brazilian universities?

"Affection, relationships outside of the work environment."

This response reflects on thematic ideas throughout this study that in general, Brazilians tend to be more affectionate and more involved in their relationships outside of work. Contrary to this, Americans tend to maintain a more strictly professional approach regarding their relationships in the workplace and are not necessarily concerned that friendships with work colleagues extend outside of the work environment.

3.4.8 Participant H

The consideration for climatic differences and the potential problems that they bring can be found again in the open-ended responses of Participant H.

"Climate: I have found that it can be a problem for people living in a tropical country. I had trouble with the long winter in the northern US. "

Consistent with the previous mention of climate from Participant G, Participant H also expressed concern about the difficulty of having to endure a long winter while living in the US. Here it can also be seen that the relationship between weather and a person, at least for this participant, is related to the fact that being from a country where the climate is drastically different from that of one that has such an element as long winters in this case. Such a difference forces the person to undergo a serious adjustment and can result in difficulty for them.

Also consistent with many other responses, is the attention and concern given to language in the area of communication as it is naturally a fundamental component of this facet.

"Communication: Speaking the language of the host country well is fundamental in both professional and social aspects."

Especially interesting in this participant's comment is the mention that communication was not only vital for social-life purposes as many other participants mentioned, but also simply for the purpose of communication in the workplace. Obviously, it would make sense that language would be essential for this purpose, but several of the other participants had a tendency to contextualize the importance of language as being necessary for social life and adaptation.

This participant also pointed out that it was equally as important for the purpose of being able to communicate with one's peers in their everyday work environment.

In terms of the importance of social life, Participant H highlights that the value of an enriching cultural experience abroad can only take place when one is able to effectively live with the local people of a given place.

"Social life: The trip abroad is not only to do research or study. Living in a culture different from yours is very enriching and this experience only occurs if it is possible to live with the local people."

This participant's point of view is valid based on the literature that was reviewed in preparation for this research. Throughout the many articles read and evaluated for this project, it is a very prominent theme that living comfortably and being able to adapt to a new culture are essential components that must be accomplished for an expatriate to be able to successfully conduct and manage their work in a foreign environment. In this regard, Participant H commented that they had their family and other Brazilians in their area with whom they could interact.

- How was your social life outside of the workplace?

"I used to go for walks with my family in the various parks that the city offers. There was another family of Brazilians with whom we interacted."

Having contact with people from one's native country has shown to be consistently positive for social interaction and adaptation in a foreign living environment. Perhaps this is even more important in the case of Brazilians as they are generally a very social culture of people who value social interaction and relationships both inside and outside of the workplace.

As previously mentioned, food in the US did not seem to be a major concern for Brazilians living there mostly due to the variety of options available. This notion is evident in Participant H's quote here:

"Alimentation: It is fundamental to one's well-being to eat well. In the US, although the food customs are a bit different, it is possible to find almost everything at the supermarkets. So we did not have to change our food because of local customs. "

Not only does this quote further the notion about wide varieties of food being available, but it can also be seen here that when it comes to food, it is not only a matter of types available,

but also a matter of customs and habits that can be different when living abroad. Here, this aspect is mentioned as being merely “a little different.” Nonetheless, this is a good point of consideration that could differ more drastically in cases of other nationalities that might not be as similar in this way as Brazil and the US are.

In the workplace, Participant H demonstrated similar feelings and made relevant observations consistent with those from the other participants. Just as the other participants mentioned not being oriented specifically regarding their culture, so too did this participant:

- How were you advised on how to handle the local work team?

“I was not oriented. It was a flaw in the project.”

Likewise, in the context of relationships in the workplace, Participant H also commented on the fact that their American counterparts were not necessarily the most receptive in the workplace and that, as a result of this, they felt that they were at times forced to work in isolation.

- Do you have any compliments or complaints about the work environment? What are they?

“People were not very welcoming. At certain times, I worked in isolation. ”

Isolation and not being able to feel like one is socially a part of the team or project can have a negative influence on a person’s well-being, and thus their work as well in the same way that such isolation can affect a person in their social life. Perhaps for future considerations, this is something that US universities and other international work environments can consider including as the participation and work production of foreign researchers and workers is also to their benefit.

The same display of dissatisfaction from Participant H can be seen when asked what they liked and did not like about their work environment.

- What did you like about your work environment?

“Live immersed in the research project, without straying from the focus.”

- What did you not like?

“The cold social dynamic of the work environment.”

On a positive point, the participant did express being satisfied in terms of being able to maintain focus and continue their project without getting distracted from it. This too, is probably related to the continuing theme regarding Americans being more strictly professional in the workplace while not giving as much attention to socializing or friendship in their work environment as can be seen very clearly in the participant's second response.

Additional positive points from this participant regarding the work environment included the following:

- Do you think the workload was adequate? Why?

"My workload was what I determined."

- Do you think that as a foreigner, you participated in the decision-making process regarding the research project?

"Yes."

Through these quotes, it can be observed that more autonomy was given to the participant both in relation to determining their workload, and in terms of the decision-making process regarding managing one's own project. Both of these aspects have received positive feedback throughout the responses of this study and are seemingly factors that contribute positively to the international work experience for the participants involved in this study.

Lastly, further evidence of the difference between a more collective Brazilian culture and a more individualist US culture can be seen in the following quotes:

- What major cultural differences did you notice in your work environment in US and Brazilian universities?

"Greater focus on research, with a collection of results."

- Do you think that the environment that produced your research was more individualist or collective? Why?

"More individualist. The group was not very big and there were not many opportunities for interaction."

Again it can be seen that Americans prefer professional relationships in the workplace. However, in this quote it can also be seen that as a consequence of such practice and behavior, more focus on projects is actualized and workers are held accountable to produce effective

results. Additionally, in the response to the question above, it can be seen that social interaction was limited, even in a small group setting; this participant felt that the opportunities to interact were limited. Such an observation only furthers the ideas that Americans tend to be more strictly professional in their work environments while suggestively, Brazilians are not necessarily accustomed to such practical behavior in the workplace.

3.4.9 Participant I

As previously discussed, the language of a given place, particularly a place outside of one's home country, is an essential component in being able to communicate in the workplace as well as have an interactive social life. Thus, the two categories of communication and social life are closely related in that communication is very fundamental to facilitating a successful social life, especially in the context of an expatriate who is residing abroad. Throughout this study it has been observed that social life can also be facilitated in the case that the Brazilian participants have contact with other Brazilians in their community of residence (also probably very closely related to the point about language simply being a facilitator of communication, and consequently shaping one's social life). In the case of Participant I, insight into the balance of these two facets is given as this participant gives an example of how too much social interaction with people of one's home country and in one's native language can impede language acquisition necessary to thrive in a foreign environment.

"Social life: The lack of communication ends up disrupting friendships with Americans and consequently leading to the search for friendships with other Brazilians. This can be a problem. Security in the friendship with Brazilians outside of Brazil may end up being harmful."

The way that this participant describes the relationship between communication and social life demonstrates that it is an interesting circle of connections that can easily become hurtful to the person in their adaptation if they are not careful in balancing these components. In another question in the survey, one can see that, consistent with the first quote, this participant did not necessarily have much interaction with American counterparts in the workplace.

- How did you socialize with your work team?

"Just a few birthday parties on the spot."

This is suggestive of how the language barrier can impede one's communication ability. Furthermore, it is interesting to see that in this analysis of the situation, the need or desire to seek friendships with other people from one's native country, can be provoked by a lack of language ability in the first place. This could be more of a matter of preparation and suggest that in order to avoid such a situation, one must focus more on being prepared in terms of their language ability before arriving in a foreign country. With all of that said, this participant did not seemingly have a social life limited to contact with Brazilians as can be seen in the following response:

- How was your social life outside of the workplace?

"Friendships with natives, professors and Brazilian students. I participated actively in a religious group, with whom I have contact to this day. "

Although it cannot be determined for sure, the last part of this comment is suggestive of the fact that the contact maintained is with a group in the US. However, the response was not clear enough to give any insight on any interaction with American counterparts during this participant's experience.

Similar to many other participants, this individual said that they received no orientation specific to their culture or how to adapt it in the workplace.

- How were you oriented in how to adapt your culture in the workplace?

"I was not [oriented]."

Also consistent with several other responses, was what this participant had to say about the decision-making process:

- Do you think that as a foreigner, you participated in the decision-making process regarding the research project?

"It depends on the type of project. For the postdoc, I managed the project and I was also the decision maker. It depends again on the type of research (doctorate, postdoctoral, or other type of project). "

As mentioned before, it seems that the US universities grant more autonomy to their researchers in making decisions regarding their projects than perhaps Brazilians are used to. In turn, this was a positive aspect for the participants of this study.

In analyzing the cultural differences observed by this participant, it can be noted that they felt a higher level of respect as a professor:

- What major cultural differences did you notice in your work environment in US and Brazilian universities?

"Maturity and respect towards the professor. Completely different."

Additionally, the general theme that Americans tend to be more individualist and that Brazilians tend to be more collective was also present:

- Do you think that the environment that produced your research was more individualist or collective? Why?

"Individualist."

Connecting this quote to the first quote introduced from this participant regarding language and contact with people from one's native country, it can be seen that this lack of language ability can be especially detrimental in a more said-to-be individualist society such as that of the US. Thus, to reiterate, special attention and consideration is perhaps very necessary in the area of language for people preparing to live outside of their native country as language is a very fundamental and incredibly vital component in the context of both living and working in a foreign country. It is an aspect that tends to be a determining factor in one's overall success abroad as much in their social life as it does in their work life (not to mention one's social life and well-being can have additional impact on their ability to produce results in their professional life).

3.4.10 Participant J

Participant J was, by some measure, an exception to the other participants in terms of what general comments they had about language and cultural adaptation. This was specifically related to the fact that this particular participant was an exchange student as a teenager and as

a result already felt very comfortable with both communicating in English and in terms of being well adapted to American culture.

- Do/did you speak English when you participated in the research project? Did you have difficulty communicating?

"I already spoke English because I was an exchange student as a teenager and I took the full course of English at the Institute of Culture Brazil-United States. I had no difficulty communicating. "

Moreover, this advantage also helped this participant succeed in the workplace as can be seen in the following quote:

- How was your social life outside of the workplace?

"Very good, because I communicated well in English. I lived in a family home and I got along well with family members and friends. "

Participant J added that they felt so accustomed to American culture at the time of doing research in the US that they did not consider the adaption process of social culture difficult in terms of the overall experience.

- With regard to social culture, what were the points that you found most difficult?

"I did not find it difficult at all because I was already accustomed to American culture since I lived with a family in the student exchange program and for having maintained friendships until today with my American family and friends, having visited them countless times and some of them also came to Brazil to visit my family."

As highlighted in the quote, this ease came as a consequence of maintaining contact with the American family with whom the resided. Additionally, having returned to visit them many times over the years since having completed an exchange program in the US also facilitated with adaption. This is a rare case in the context of the participants of this study but it demonstrates just how much contact and preparation can make a difference in overall success and in facilitating the adaptation and linguistic issues that one faces while living abroad.

In the case of Participant J, orientation seems to have been generally minimal in most areas. This comes as no surprise as it has been the case with most participants in this study and a generally constant theme in the open-ended question responses.

- When you arrived in your work environment in the host country, did you receive clear, objective guidance on how to do your job?

"Not really. My advisor had already told me that I would have limited orientation because I was too busy. But soon I adapted and met other researchers who helped me and were, along with my advisor, partners in various jobs."

- How were you advised on how to handle the local work team?

"Yes, but to a limited extent. I had to adapt to the way they work."

When asked what they liked about their work, Participant J mentioned that the overall "spirit of collaboration" was particularly satisfactory:

- What did you like about your work environment?

"In general, the fellowship, spirit of collaboration, no slander."

Interestingly enough, this is not the first compliment of American collaboration from this participant, nor is this the only participant to praise such an area of their American workplace. What is interesting about this is that Brazilians tend to find that Americans are more individualist as a society, and that this tends to be true perhaps more than anywhere, in their social lives. However, at the same time, it can be observed that Americans have made an impression on Brazilians in how they are collaborative in the work environment. This general feedback can be seen again from this participant in their response related to how they felt about the specific environment where they produced their research:

- Do you think that the environment that produced your research was more individualist or collective? Why?

"It was both. [There were] Some more individualist researchers, but my research covered several areas and I had good collective, multidisciplinary support."

Even though they felt it was generally collective in their specific area, there is also mention here of some researchers being more individualist. Thus, perhaps it can be said that although the American counterparts involved in this study were generally viewed as individualist on many levels, they also have a tendency toward collaborative group work in professional settings. Another quote to support this is regarding this participant's response about how the experience impacted their professional life:

- What impacts (positive and negative) did the exchange bring to your professional life?

"Positive impacts: collaborative spirit; ease in making decisions; contacts that have lasted until now enabling research support. Negative impacts: None."

Here, "ease in making decisions" is also mentioned. In addition to comments regarding American collaborative tendencies, this study has also seen a lot of positive feedback from the Brazilian researchers interviewed about not only having the freedom to make their own decisions, but also in participating in group decisions and having the position of giving their opinion more so than they had in Brazil.

- Do you think that as a foreigner, you participated in the decision-making process regarding the research project?

"Yes, I had the freedom to speak and make decisions."

Having the freedom to give more input in the decision-making process also demonstrates this "collaborative spirit" that this participant mentioned throughout their responses. Perhaps it can be said that although in many ways Americans are in fact more individualist than Brazilians, they also have a fair amount of collectivism incorporated into their work culture in terms of collaborative group work on projects and regarding the way in which decisions are made. One final quote that is evident of this is regarding how this participant felt about the contribution of their experience and their work while living and doing research in the US:

- How does your work as a foreigner contribute to society and the organization in the host country?

"I have had more collaboration to bring back to my country than collaboration to bring to them. However, they were interested in knowing about the Brazilian situation regarding my research area, because the automobile industry is very interested in the Brazilian market."

3.4.11 Participant K

Participant K demonstrated favorable results consistent with those of the other participants in this study. Concerning the language and communication aspect, this participant indicated that they spoke English at the time of arriving in the US, and as a result did not have difficulty in their project or in communicating in general.

- Do/did you speak English when you participated in the research project? Did you have difficulty communicating?

"I could speak [English]. I had no difficulty"

In addition to this, in terms of cultural preparation, this particular participant had had previous contact with the university where they conducted their research.

- Did you have any contact (holiday, friends, university visit, *etc.*) with the host country prior to actual participation (travel) in the research project? What?

"Yes, I made a previous visit."

Nevertheless, this candidate still expressed that they felt a difference in regard to social life and specifically commented that this aspect was not as strong as it is in Latin American countries, especially outside of the workplace.

- With regard to social culture, what were the points that you found most difficult?

"Unlike Latin [American] countries, there is no strong social co-existence outside of the work environment."

This was also the case when asked about the main cultural differences that this participant observed between Brazil and the US.

- What major cultural differences did you notice in your work environment in US and Brazilian universities?

"Lack of social life outside of work. Strictly professional relationships."

As has been the tendency in the results of this study, this participant also added that as a result of the lack of social life and interaction outside of work, they spent most of their social life and energy with their own family that they had brought along for the experience.

- How was your social life outside of the workplace?

"Just with my family."

Additionally, Participant K showed consistent results with the others in this project in terms of orientation received at the university where their research was conducted. Or, in the case of orientation related specifically to their culture, the absence therein.

- When you arrived in your work environment in the host country, did you receive clear, objective guidance on how to do your job?

"Yes."

- How were you advised on how to handle the local work team?

"In a general way."

- How were you oriented in how to adapt your culture in the workplace, including with staff (e.g. professors, students, technicians, secretaries...)?

"There were no considerations about my culture."

The participant did mention that they felt their team at the university was prepared to receive them and work with them in an appropriate manner.

- Do you think that the work team was prepared to receive a member from another culture? How did you socialize with your work team?

"Yes, prepared. Everything within normalcy."

However, there is also mention of how the team was more individualist, a response commonly found from participants of this study.

- Do you think the environment that produced your research was more individualist or collective? Why?

"Individualist. Several people developing their work."

When it came to participation in the decision-making process, this participant expressed that they had the freedom to make their own decisions specifically when related to their own project but not necessarily in the group at the university of which they were a part. This too, is not far off from many of the other responses given by the other participants of this study.

- Do you think that as a foreigner, you participated in the decision-making process regarding the research project?

"For my research project, yes, for the group I'm linked to, no."

A particular response of interest from Participant K came when they were asked about the contribution of their project to society and to the organization of affiliation:

- How does your work as a foreigner contribute to society and the organization in the host country?

"Very little. Only for the internationalization of the university in which I find myself."

Perhaps this is a look into why the social aspect in this participant's experience and that of other participants was lacking. In addition to the social life being subpar by Brazilian standards, and the considerations of how Americans tend to be seemingly more strictly professional in the workplace, what is suggested here is that the participant was only a part of the team or involved in the project at the university to contribute to the internationalization of the university. Obviously, this participant has their personal reasons for being there and probably plenty to gain from the experience. Still, this comment does show that it is possible that perhaps American universities involve international researchers for questions of reputation or funding matters related to this idea of "internationalization."

4.5 SYNTHESIS OF OPEN-ENDED QUESTION RESPONSES

In certain aspects, the open-ended question responses were very consistent with what would be expected based on the data. This was true in the case of religion, for example, as the majority of the participants indicated no strong religious affiliation. The few who did also had the most to say in the open-ended responses. At the same time, however, one of the participants who identified as being atheist also made an interesting comment related to the fact that they felt less pressure and more free to be as they wanted in the US when compared to Brazil.

Participants in the study who went the US to do research and took their family with them, tended to show the least amount of concern with relationships and missing family and friends in Brazil. In some cases, there were participants who did not necessarily go to the US with their families but admitted spending most of their free time with other Brazilians that they met who were also living in the US. For these participants, the longing for family and friends was also generally less per their comments in the open-ended question section of the survey. This particular aspect was important, as seen in the literature, because maximum comfort and minimal stress are essential for researchers and workers to succeed in their environments abroad. Such comfort and stress is accounted for and extended in the participants' everyday lives and social lives outside of the workplace.

While taking family or spending time with other Brazilians in the US was positive in terms of comfort and helping with stress levels, in some cases it took away from the very important aspect of language and communication. Also seen in the literature was that communication and ability to communicate in the local language of the host nation is essential for people choosing to work or do research abroad. One of the themes seen in the literature that focused specifically on culture and researchers involved in international collaborations, was the idea that knowledge is transmitted more effectively through personal contact. For this reason, one can see that language and communication ability are vital, not only on a personal or professional level for the participants involved in international research projects, but also for the aims and benefits that such international collaborations contribute to the world and society.

Concerning language ability, participants who had already been to the US before going as a professional researcher demonstrated a more generally relaxed and “at-ease” attitude in terms of being able to communicate effectively in English whilst residing in the US. This was true more than ever when considering the participants that had lived or studied in the US as teenagers, and thus who had stayed there for an extended period of time rather than merely taking a vacation or having a conference over the span of a few days or weeks. Although this information is suggestive of the fact that having prior experience, and especially an extended one, is helpful in language acquisition and communication ability, it is also necessary to consider that these comments are very subjective and also came from the very person gauging their own ability. This is not to say that these comments are invalid by any measure. However, what it does present is the idea that for future research, a more measurable and objective form of language assessment would be perhaps more informative and an area worth exploring to better contextualize and more accurately evaluate the language ability of the participants as opposed to simply relying on their self-evaluations. Language is a complex mechanism in which sometimes people are not necessarily aware of their own faults or difficulties. Even in the case of native speakers of all languages all over the world, can examples be found of people that use incorrect words or grammar without ever knowing it. Thus, the reason that this line of research would be interesting to explore is that it is possible that some of the participants involved in the study did not always communicate as effectively as they thought they were able to in all situations and cases. Connecting this to the literature again, the theme about knowledge being transferred in personal situations can be both helped and hurt depending on the degree to which the people involved are able to successfully communicate and transfer knowledge from one person to another.

Seemingly inconsistent open-ended question responses came from some of the participants when asked to talk their experiences regarding the ideas of collectivism and individualism. In general, many of the participants consistently commented that they felt that when compared to Brazilian culture, that of the US was more individualist in its tendencies. This was very consistent throughout the assessments of the majority of participants involved in this study. These comments tended to come in the questions regarding one's social life and social interaction. Such points of view also carried over to questions related to interaction with co-workers in the workplace.

However, what was interesting was that when the participants were asked about specific things like the decision-making process and the work methodology and practices during their time in the US, several of the participants commented that these areas were relatively a lot more collective when compared to their work environments in Brazil. What is interesting about this is that the US tends to be a very work-oriented and work-driven culture. Likewise, Brazil is a very social-interaction-based and relationship-based culture. In both of these respective areas, each country tends toward having a more collective approach while the areas that are seemingly not as valued tend to show a more individualist base. These comments, namely in the context where they appeared in the open-ended questions, reflect on the idea that perhaps the participants tend to see more or be more critical in cultural areas that they value more in their native culture of Brazil. In this facet, there is a direct connection to the literature review that pointed out that cultural values are things that people will take with them and hold on to closely while living and working overseas. Additionally, such points of view are, to a certain extent, thought-provoking in that they are very subjective and thus may be based on already formed ideas that the participants had going into the experience. In other words, as also pointed out in the literature, sometimes people continue to see and believe ideas that they have in their mind regardless of having an altered reality placed in front of them.

CHAPTER 5: CONCLUSIONS

International project management is becoming more complex with all of the influence of various cultures and stakeholders representing an array of countries all over the world. The more complex it becomes, the more research that is necessary to provide insight and lead to solutions of how to deal with such complications. Various models of how to accommodate and train individuals in the area of cultural awareness have been developed in order to facilitate this process. However, a necessary first step is the correct selection of individuals who are to participate in the project. This is an essential step as it lays the foundation for the project to come. Assisting the people involved in cultural adaptation can also be seen as equally important due to the comfort and trust it adds to the dynamic of international relationships at play. Comfort and understanding build trust which lead to effective production within the international projects. All of the previously mentioned aspects of building solid relationships add to the risk-perception part of the international management topic that is being analyzed. Finally, a very important characteristic to consider in the context of international project management is the fact that cultures cannot necessarily be divided by country as a given country can have an array of its own cultures.

Important factors that had the most influence on the participants' productivity in this study were those related to comfort such as aspects of food, social life and contact with family whether living with their family or living at a distance from their family. Of these mentioned aspects, social life was seemingly the most important to the participants interviewed. Linked to this was the aspect of communication, and specifically in the case of this study, English language ability. The most consistent data seen throughout the responses in all of the areas measured in this survey pointed to the theme seen throughout the literature, that communication is vital for someone working and living overseas. This was observed in both sections of the survey related to everyday life and questions specifically regarding aspects of the participants' work lives. This came as no surprise since it was found in the literature review that comfort and socializing are fundamental aspects of one's well-being, which in and of itself is fundamental to one's ability to be productive. Likewise, communication in the relevant language of a given country or region within a country is essential in determining one's ability to communicate.

In the work environment, it was seen that being oriented in one's job and duties was of particular importance. Flexibility in work hours and having more autonomy to not only choose

one's work hours, but also be more independent in managing one's own project, also came through as positive aspects of cultural differences observed by Brazilians living in the US. When it came to participating more in decision-making processes as collective groups, Brazilians demonstrated that this was an overall positive part of their experiences and gave good feedback regarding the idea of being included more in this facet of their work lives. In fact, in addition to this, several participants also added that the workplace dynamic was very collective in general, and not only were decisions made as a group, but so too was research done in a more collective manner.

Other, more uncontrollable factors such as weather and politics, also had a measurable influence on some of the participants of this survey as well. Weather influenced the comfort level of those participants who had lived in colder regions with more severe winters. Similarly, a correlation was seen between comfort level and concern, and political party of the US president at the participant's time of stay.

Thus, what can ultimately be gained from this study is that there are particular areas, such as communication and language ability, along with social adaptation, that should be considered with extra attention for people that are going to live abroad and conduct research or in some way be a part of an international work environment. Preparation on the end of the hosts can also be taken into further consideration in order to improve productivity results in a more collective and participatory way. This is especially important since international collaboration, just as communication, is a two-part process that involves an exchange of both giving and receiving, or more specifically expressing oneself, and understanding in the case of communication.

Regarding future research, it is suggested that more researchers be interviewed in order to accumulate more data for comparisons and analyses. A recommended approach for future research would be to measure the effects of time spent abroad by conducting interviews and collecting data with participants both before and after their time abroad in order to compare and really see the impact of culture as it happened to them. In this study, the results were more difficult to interpret as they were heavily based on the perceptions and self-evaluations done by the participants. In the future, a rubric could be better established in order to measure things such as language ability so that the results are not only contingent on the participants' self-assessments.

It would also be of interest to interview Brazilian professors that have done research in other countries besides the US to compare the results with those of this study. Along with this, future research could look to measure the cultural impact on researchers from other countries that have lived abroad in Brazil and potentially even compare these to the observations that were made in this study by the Brazilian participants, or of those made by Brazilian participants in future studies similar to the present one.

Finally, some particular themes in the context of international research that emerged in this study and have now been opened up to be researched in further detail include: language ability and language preparation for international researchers and workers, the role and impact of social life and social interaction while abroad, the impact of distance from family, the role of the host institution and its orientations methods, and the influence of politics, laws and weather.

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INDEX A

PARTICIPANT A

- Você fala/falava a língua inglesa quando foi participar do projeto de pesquisa? Sentiu dificuldade para se comunicar?

“Falava um pouco e senti dificuldade em me comunicar.”

- Do/did you speak English when you participated in the research project? Did you have difficulty communicating?

“I spoke a little [English] and I found it difficult to communicate.”

- O que você gostou no seu ambiente de trabalho? O que não gostou?

“Gostei do comprometimento das pessoas com seus trabalhos e pesquisas. Não gostei muito do isolamento das pessoas no ambiente de trabalho.”

- What did you like about your work environment? What did you not like?

“I liked the commitment of people to their work and research. I did not really like the isolation of people in the workplace.”

- Quando você chegou ao seu ambiente de trabalho no país anfitrião, recebeu orientações objetivas e claras sobre como executar seu trabalho?

“Recebi algumas orientações, mas não objetivas de como executar meu trabalho.”

- When you arrived in your work environment in the host country, did you receive clear, objective guidance on how to do your job?

“I got some guidance, but not objectively on how to do my job.”

- Você foi orientado sobre como lidar com a equipe local de trabalho?

“Não fui orientado em como lidar com a equipe.”

- Were you advised on how to handle the local work team?

“I was not guided on how to deal with the team.”

- Como você foi orientado para adaptar sua cultura a do local de trabalho, inclusive a equipe (por exemplo: professores, alunos, técnicos, secretárias, ...)?

“Não fui orientada para adaptar minha cultura a do local de trabalho.”

- How were you oriented in how to adapt your culture in the workplace, including with staff (e.g. professors, students, technicians, secretaries...)?

“I was not geared to adapt my culture in the workplace.”

- Você considera que a equipe de trabalho estava preparada para receber um integrante de outra cultura? Como você se socializa com sua equipe de trabalho?

“Acho que sim, eles recebem muitos estrangeiros na universidade. Eu me socializo bem dentro do possível, sem grandes problemas.”

- Do you think that the work team was prepared to receive a member from another culture? How did you socialize with your work team?

"I think so, they get a lot of foreigners at the university. I socialized as well as possible, without major problems. "

- Quais as principais diferenças culturais você percebeu no seu ambiente de trabalho na universidade dos EUA e do Brasil?

“A principal diferença que percebi até o momento foi o comprometimento dos alunos de pós graduação com seus projetos de pesquisa, o que nem sempre acontece no Brasil.”

- What major cultural differences did you notice in your work environment in US and Brazilian universities?

"The main difference I've noticed so far has been the commitment of graduate students to their research projects, which is not always the case in Brazil."

- Você acha que o ambiente a qual produziu sua pesquisa era mais individual ou coletivo? Porque?

“Mais coletivo, os alunos e professores estavam sempre em contato em reuniões semanais e sempre se ajudavam quando necessário.”

- Do you think the environment that produced your research was more individualist or collective? Why?

"More collective, professors and students were always in touch at weekly meetings and always helping each other when needed."

PARTICIPANT B

- Você fala/falava a língua inglesa quando foi participar do projeto de pesquisa? Sentiu dificuldade para se comunicar?

“Não falava e tive dificuldades normais.”

- Do/did you speak English when you participated in the research project? Did you have difficulty communicating?

"I did not speak [English] and I had normal difficulties."

- Com relação a cultura social, quais foram os pontos fortes que mais achou difícil?

“Aprender uma nova cultura sempre foi instigante. Adorei o processo. Não achei nada realmente complicado. O país funciona muito (USA e Espanha).”

- With regard to social culture, what were the points that you found most difficult?

"Learning a new culture has always been exciting. I loved the process. I did not find anything really complicated. The country functions well (USA and Spain). "

- Quanto à questão de cultura religiosa, você teve algum problema? Qual?

"Nenhum problema. Sendo ateu, senti menos pressão nos Estados Unidos do que sinto no Brasil."

- What about religious culture, did you have a problem? What?

"No problems. Being an atheist, I felt less pressure in the United States than I do in Brazil. "

- Quando você chegou ao seu ambiente de trabalho no país anfitrião, recebeu orientações objetivas e claras sobre como executar seu trabalho?

"Já possuía um plano bem definido sobre o que fazer e isso facilitou o processo."

- When you arrived in your work environment in the host country, did you receive clear, objective guidance on how to do your job?

"I already had a well-defined plan of what to do and that made the process easier. "

- Como você foi orientado para adaptar sua cultura a do local de trabalho, inclusive a equipe (por exemplo: professores, alunos, técnicos, secretárias...)?

"Isso não foi feito e não teve necessidade. Lembro-me de algumas dicas básicas: Não usar software pirata/ Não fumar nos recintos."

- How were you oriented in how to adapt your culture in the workplace, including with staff (e.g. professors, students, technicians, secretaries...)?

"This was not done and there was no need. I remember some basic tips: Do not use pirated software / Do not smoke in closed spaces. "

- O que você gostou no seu ambiente de trabalho?

"Não há competição e os pesquisadores são excepcionalmente humildes e amigáveis."

- What did you like about your work environment?

"There is no competition and the researchers are exceptionally humble and friendly."

- Você acha que a carga horário de trabalho foi adequada? Porque?

"Extremamente flexível para Doutorado e pós-doutorado."

- Do you think the workload was adequate? Why?

"Extremely flexible for PhD and postdoc. "

- Você considera que como estrangeiro, participa da tomada de decisão referente ao projeto de pesquisa?

"Fui sempre consultado em pesquisas de grupo e defini os rumos de minha própria pesquisa."

- Do you think that as a foreigner, you participated in the decision-making process regarding the research project?

"I was always consulted in group research and set the course for my own research."

- Você acha que o ambiente a qual produziu sua pesquisa era mais individual ou coletivo? Porque?

"Muito coletivo e colaborativo. Escrevíamos artigos de forma conjunta."

- Do you think the environment that produced your research was more individualist or collective? Why?

"Very collective and collaborative. We wrote articles together."

- Quais as novas habilidades ou conhecimentos que você considera ter desenvolvido após seu intercâmbio?

"Habilidade de comunicação, confiança e melhor entendimento do método científico."

- What new skills or knowledge do you consider to have developed after your exchange?

"Ability to communicate, trust and better understand the scientific method."

- Quais as principais diferenças culturais você percebeu no seu ambiente de trabalho na universidade dos EUA e do Brasil?

"Somos muitos parecidos em média, mas os extremos são bem diferentes. Os melhores americanos são muito melhores que os melhores brasileiros. Há uma abundância de recursos nos Estados Unidos e a burocracia é menos relacionada aos professores. A existência de uma gama de nacionalidades em ambientes universitários é algo que não temos no Brasil."

- What major cultural differences did you notice in your work environment in US and Brazilian universities?

"We are very similar on average but the extremes are very different. The best Americans are much better than the best Brazilians. There is an abundance of resources in the United States and bureaucracy is less related to professors. The existence of a range of nationalities in university settings is something we do not have in Brazil."

PARTICIPANT C

- Você fala/falava a língua inglesa quando foi participar do projeto de pesquisa? Sentiu dificuldade para se comunicar?

"Sim. Falava precariamente"

- Do/did you speak English when you participated in the research project? Did you have difficulty communicating?

"I did not speak [English] and I had difficulties."

- Com relação a cultura social, quais foram os pontos fortes que mais achou difícil?

“Conhecer e adaptar aos hábitos de convívio social.”

- With regard to social culture, what were the points that you found most difficult?

“To know and adapt to the habits of social life.”

- Você considera que a equipe de trabalho estava preparada para receber um integrante de outra cultura? Como você se socializa com sua equipe de trabalho?

“Parcialmente socialização ocorrida apenas em reuniões festivas anuais.”

- Do you think that the work team was prepared to receive a member from another culture? How did you socialize with your work team?

“Partial socialization only in annual festive meetings.”

- Quanto á questão de cultura religiosa, você teve algum problema? Qual?

“Não.”

- What about religious culture, did you have any problems? What?

“No.”

- Como você foi orientado para adaptar sua cultura a do local de trabalho, inclusive a equipe (por exemplo: professores, alunos, técnicos, secretárias...)?

“Não.”

- How were you oriented in how to adapt your culture in the workplace, including with staff (e.g. professors, students, technicians, secretaries...)?

“No.”

- Você considera que como estrangeiro, participa da tomada de decisão referente ao projeto de pesquisa?

“Sim.”

- Do you think that as a foreigner, you participated in the decision-making process regarding the research project?

“Yes.”

- O que você gostou no seu ambiente de trabalho?

“Pessoas focadas em seu trabalho”

- What did you like about your work environment?

“People focused on their work”

- O que você não gostou?

“Pouco interação após as aulas.”

- What did you not like?

"Less interaction after class."

- Quais as principais diferenças culturais você percebeu no seu ambiente de trabalho na universidade dos EUA e do Brasil?

"EUA: Pessoas mais reservadas durante o trabalho e raríssimas atividades sociais após o trabalho. Brasil: Pessoas mais espontâneas e mais festivas."

- What major cultural differences did you notice in your work environment in US and Brazilian universities?

"US: more reserved people during work and very rare social activities after work. Brazil: More spontaneous and more festive people."

- Você acha que o ambiente a qual produziu sua pesquisa era mais individual ou coletivo? Porque?

"Individual. Eu era o único pesquisador em minha área de pesquisa."

- Do you think that the environment that produced your research was more individualist or collective? Why?

"Individual. I was the only researcher in my research area."

PARTICIPANT D

"Alimentação: não é um fator muito crítico, especialmente no mundo globalizado de hoje."

"Food: it's not a very critical factor, especially in today's globalized world."

"Religião: pode ser um problema em lugares específicos com tradição mais conservadora."

"Religion: It can be a problem in specific places with a more conservative tradition."

"Comunicação: não se comunicar pode atrapalhar muito a adaptação."

"Communication: not communicating can be very disruptive to adaptation."

- Sentiu dificuldade em se comunicar?

"Não."

- Did you have difficulty communicating?

"No."

- O que considera a maior dificuldade em se comunicar?

"Lidar com expectativas dos outros."

- What do you consider the most difficult thing about communicating?

"Dealing with the expectations of others."

- Você teve algum contato (férias, amigos, visita em universidade, *etc.*) com o país anfitrião antes da participação efetiva (viagem) no projeto de pesquisa?

“Sim. Moirei nos EUA quando jovem.”

- Did you have any contact (holiday, friends, university visit, *etc.*) with the host country prior to actual participation (travel) in the research project?

“Yes. I was in the US when I was young.”

- Como você foi orientado sobre como lidar com a equipe local de trabalho?

“Não ouve orientação nesse sentido.”

- How were you advised on how to handle the local work team?

“I did not hear anything about that.”

- Como você foi orientado para adaptar sua cultura a do local de trabalho?

“Não ouve orientação nesse sentido.”

- How were you oriented in how to adapt your culture in the workplace?

“I did not hear anything about that.”

- Você considera que a equipe de trabalho estava preparada para receber um integrante de outra cultura?

“Sim, o ambiente sempre foi multicultural.”

- Do you think that the work team was prepared to receive a member from another culture?

“Yes, the environment has always been multicultural.”

- O que você gostou no seu ambiente de trabalho?

“Ambiente acadêmico instigante.”

- What did you like about your work environment?

“Instigating academic environment.”

- O que você não gostou?

“Em alguns momentos deadlines muito apertados.”

- What did you not like?

“In some moments very tight deadlines.”

- Você considera que como estrangeiro, participa da tomada de decisão referente ao projeto de pesquisa?

“Nos projetos onde trabalhei não pois fui contratado a posteriori. Mas nos projetos de que participei como autor sim.”

- Do you think that as a foreigner, you participated in the decision-making process regarding the research project?

"In the projects where I worked, not because I was contracted a posteriori. But in the projects that I participated as an author, yes. "

- Quais as principais diferenças culturais você percebeu no seu ambiente de trabalho na universidade dos EUA e do Brasil?

"Liberdade para executar tarefas importantes a pesquisa, baixo nível de burocracia para processos triviais para o andamento da pesquisa. De modo geral a cultura brasileira pressupõe que o pesquisador vai fazer algo errado e, portanto, os tramites burocráticos são em geral feitos para coibir o máximo de possibilidades. Lá pressupõe que a pessoa realizará seu trabalho da melhor maneira possível."

- What major cultural differences did you notice in your work environment in US and Brazilian universities?

"Freedom to perform important research tasks, low level of bureaucracy for trivial processes for the progress of research. In general, the Brazilian culture assumes that the researcher will do something wrong and therefore the bureaucratic procedures are usually made to curb the maximum of possibilities. It presupposes that the person will perform their work in the best possible way. "

- Como era sua convivência fora do local de trabalho?

"Boa. Participava das atividades da comunidade."

- How was your social life outside of the workplace?

"Good. I participated in community activities. "

PARTICIPANT E

"Comunicação: O mais fundamental. A não-comunicação gera barreiras, você evita de expor seus pensamentos, de ir a lugares, fica isolado."

"Communication: The most fundamental. Non-communication breeds barriers, you avoid exposing your thoughts, going places, being isolated. "

- Sentiu dificuldade em se comunicar?

"Muita dificuldade."

- Did you have difficulty communicating?

"A lot of difficulty."

- O que considera a maior dificuldade em se comunicar?

“Falta de vocabulário do dia-a-dia. Convívio social: Importante principalmente para quebrar a barreira da língua e melhorar o aprendizado, e reduzir a carência da família e amigos.”

- What do you consider the most difficult thing about communicating?

"Lack of day-to-day vocabulary. Social networking: Important, especially to break the language barrier and improve learning, and reduce the shortage of family and friends. "

“Com relação a distancia familiar, é importante, porém fatores como: Skype, e a nova era digital facilitou esse item.”; “Meu problema foi fazer muita amizade com outros brasileiros. Isso prejudicou meu convívio social com outros Americanos.”

"Regarding family distance, it's important, but factors like Skype, and the new digital age made it easier."; "My problem was making friends with other Brazilians. This impaired my social co-existence with other Americans."

- Como você foi orientado sobre como lidar com a equipe local de trabalho?

“Muito tranquilo, tinham pesquisadores de vários países, apenas manter o bom senso, silêncio e organização.”

- How were you advised on how to handle the local work team?

"Very minimally, there were researchers from various countries. Just use common sense, silence and organization."

- Como você foi orientado para adaptar sua cultura a do local de trabalho?

“Nada de orientação.”

- How were you oriented in how to adapt your culture in the workplace?

"No guidance."

- Você acha que a carga horária de trabalho foi adequada? Porque?

“Sim, minha carga era livre. Não tinha obrigação de horário, apenas responsabilidades.”

- Do you think the workload was adequate? Why?

"Yes, work hours were chosen freely. I had no obligation regarding schedule, just responsibilities. "

“O dinheiro do projeto é mais livre e gerenciável pelo professor que gerencia o projeto. No Brasil o dinheiro do projeto fica com algum órgão burocrático que dificulta e atrasa todo o processo de pesquisa”

"Project money is more free and manageable by the professor who manages the project. In Brazil the project money is left in the hands of some bureaucratic organ that hinders and delays the entire research process."

- Quais os impactos (positivos e negativos) que o intercambio trouxe para sua vida profissional?

“Visão geral de como é feito ciência fora do país. Como recurso financeiro é gerenciado fora e aqui. Mostrar que no Brasil também é possível realizar pesquisa de alto nível, e que somos

respeitados lá fora. Ver o respeito com que todo o tipo de trabalho é tratado, desde pesquisa básica de graduação até os pós doutorados.”

- What impacts (positive and negative) did the exchange bring to your professional life?

"An overview of how science is done outside of the country. How financial resources are managed overseas and here. It shows that in Brazil, it is also possible to conduct high-level research, and that we are respected abroad. I see the respect with which all kind of work is handled, from basic undergraduate to postdoctoral research. "

- Você teria algum elogio ou queixa sobre o ambiente de trabalho? Quais?

"Ambiente adequado, favorável, com todos os recursos necessários para realizar minha pesquisa.”

- Do you have any compliments or complaints about the work environment? What are they?

"Adequate, favorable environment with all of the necessary resources to carry out my research."

- O que você gostou no seu ambiente de trabalho?

"Da conduta de como a professora organizava e mantinha o grupo trabalhando, focado.”

- What did you like about your work environment?

"From the conduct of how the professor organized and kept the group working, focused."

PARTICIPANT F

- Você fala/falava a língua inglesa quando foi participar do projeto de pesquisa? Sentiu dificuldade para se comunicar?

"Falava muito pouco. Sim, senti dificuldades de comunicação no primeiro mês.”

- Do/did you speak English when you participated in the research project? Did you have difficulty communicating?

"I spoke very little [English]. Yes, I experienced communication difficulties in the first month."

- Com relação a cultura social, quais foram os pontos fortes que mais achou difícil?

"A convivência social, é mais difícil quando não se conhece as pessoas, seus hábitos e sua língua. Leva-se um tempo maior para fazer amizades e aumentar o convívio com as pessoas.”

- With regard to social culture, what were the points that you found most difficult?

"The social co-existence is more difficult when you do not know people, their habits or their language. It takes a great deal of time to build friendships and to increase socializing with people. "

- O que você gostou no seu ambiente de trabalho?

“Infraestrutura.”

- What did you like about your work environment?

"Infrastructure."

- O que você não gostou?

“Individualismo.”

- What did you not like?

"Individualism."

- Como era sua convivência fora do local de trabalho?

“Ainda não consegui estabelecer amigos fora do ambiente de trabalho por estar apenas 1 mês e meio nos EUA.”

- How was your social life outside of the workplace?

"I have not been able to establish friends outside of the work environment for being only 1 ½ months in the US."

PARTICIPANT G

“Comunicação é um desafio no início, porém faz parte do processo de imersão. “

"Communication is a challenge in the beginning, but it is part of the immersion process."

“Clima: Particularmente importante para países que possuem inverno rigoroso. Pessoas provenientes de países do hemisfério sul, geralmente passam por processos depressivos no inverno do hemisfério norte, principalmente devido ao curto período de iluminação e os ajustes de relógio biológico”

"Climate: Particularly important for countries that have rigorous winter. People from countries in the southern hemisphere often go through depressive processes in the winter of the northern hemisphere, mainly due to the short period of lighting and the adjustments of biological clock "

“Convívio social: O distanciamento da cultura, do clima, e dos familiares pode prejudicar o andamento da execução do projeto. Por isso, o convívio social deve ser estabelecido no país anfitrião para que alguns laços não profissionais sejam criados.”

"Social life: distance from one's culture, climate, and family can hinder the progress of the project. That is why social networking should be established in the host country so that some non-professional ties are created. "

“Distância familiar: É preciso planejamento devido ao tempo de ausência da família. Em geral, os brasileiros são mais afetuosos e apegados ao núcleo familiar do que americanos e europeus.”

"Family distance: Planning is necessary due to the time of absence from family. In general, Brazilians are more affectionate and attached to their nuclear family than Americans and Europeans. "

- Como você lidava com a distância da família e dos amigos no Brasil (Em casos em que a família não foi junto)?

"Conversas diárias nas ferramentas on-line disponíveis na época, e muitos e-mails."

- How did you deal with distance from family and friends in Brazil (in cases where family did not go together)?

"Daily conversations via the online tools available at the time, and many emails."

- Como era sua convivência fora do local de trabalho?

"Eu estive no estágio no exterior no mesmo período que meu Marido, que estava realizando doutorado sanduíche. Além disso, a região de Boston é conhecida por ser a segunda região de maior número de imigrantes brasileiros, então, dessa forma, o convívio social foi relativamente semelhante com o do Brasil; minha família foi me visitar uma vez após seis meses de estágio. Esses fatores, sem dúvida, facilitaram muito meu trabalho."

- How was your social life outside of the workplace?

"I did an internship abroad at the same time as my husband, who was doing a doctorate sandwich program. In addition, the Boston area is known to be the second largest region of Brazilian immigrants [in the US], so in this way, social interaction was relatively similar to that of Brazil; my family came to visit me once after six months of my internship. These factors undoubtedly made my work much easier. "

- Você teria algum elogio ou queixa sobre o ambiente de trabalho? Quais?

"O ambiente de trabalho que eu tive no MIT como pós-doc é muito superior em termos de infraestrutura, conforto térmico, equipamentos de TI do que eu disponho hoje na UNIFEI como docente, e considero o ambiente de trabalho aqui muito bom se comparado com outras IES brasileiras."

- Do you have any compliments or complaints about the work environment? What are they?

"The work environment I had at MIT as a postdoc is much superior in terms of infrastructure, thermal comfort, IT equipment than I have today at UNIFEI as a professor, and I find the work environment here very good compared to other Brazilian HEIs. "

- Como você foi orientado para adaptar sua cultura a do local de trabalho?

"Não houve nenhuma restrição, nem de comportamento, nem de vestuário apenas de segurança de laboratório."

- How were you oriented in how to adapt your culture in the workplace?

"There was no restriction, no behavior, or even laboratory safety clothing."

- Você considera que como estrangeiro, participa da tomada de decisão referente ao projeto de pesquisa?

“Como respondido acima, como a bolsa de pesquisa era brasileira, e eu fui para um estágio de pós-doutorado tinha muita autonomia para tomar decisões no decorrer do desenvolvimento do projeto.”

- Do you think that as a foreigner, you participated in the decision-making process regarding the research project?

"As answered above, as the research grant was Brazilian and I went to a postdoctoral stage, I had a lot of autonomy to make decisions in the course of project development."

- Quais as principais diferenças culturais você percebeu no seu ambiente de trabalho na universidade dos EUA e do Brasil?

“Afetuosidade, relacionamento fora do ambiente de trabalho.”

- What major cultural differences did you notice in your work environment in US and Brazilian universities?

"Affection, relationships outside of the work environment."

PARTICIPANT H

“Clima: Descobri que pode ser um problema para quem vive num país tropical. Tive dificuldade com o longo inverno no norte dos EUA.”

"Climate: I have found that it can be a problem for people living in a tropical country. I had trouble with the long winter in the northern US. "

“Comunicação: Falar bem a língua do país anfitrião é fundamental tanto no aspecto profissional quanto social.”

"Communication: Speaking well the language of the host country is fundamental in both professional and social aspects."

“Convívio social: A viagem para o exterior não visa somente fazer pesquisa ou estudar. Viver numa cultura diferente da sua é muito enriquecedor e essa experiência só ocorre se for possível conviver com as pessoas do local.”

"Social life: The trip abroad is not only to do research or study. Living in a culture different from yours is very enriching and this experience only occurs if it is possible to live with the local people. "

- Como era sua convivência fora do local de trabalho?

“Fazia passeio com a família nos vários parques que a cidade oferece. Havia uma outra família de brasileiros com a qual a gente interagia.”

- How was your social life outside of the workplace?

"I used to go for walks with my family in the various parks that the city offers. There was another family of Brazilians with whom we interacted. "

"Alimentação: É fundamental para o bem-estar se alimentar bem. Nos EUA, apesar dos costumes alimentares serem um pouco diferentes, é possível encontrar quase tudo nos supermercados. Então não tivemos que mudar nossa alimentação em função dos costumes locais."

"Alimentation: It is fundamental to one's well-being to eat well. In the US, although the food customs are a bit different, it is possible to find almost everything in the supermarkets. So we did not have to change our food because of local customs. "

- Como você foi orientado sobre como lidar com a equipe local de trabalho?

Não fui orientado. Foi um ponto falho do projeto.

- How were you advised on how to handle the local work team?

I was not guided. It was a flaw in the project.

- Você teria algum elogio ou queixa sobre o ambiente de trabalho? Quais?

"As pessoas não foram muito acolhedoras. Em certos momentos, trabalhei de forma isolada."

- Do you have any compliments or complaints about the work environment? What are they?

"The people were not very welcoming. At certain times, I worked in isolation. "

- O que você gostou no seu ambiente de trabalho?

"Viver em imersão no projeto de pesquisa, sem desviar o foco."

- What did you like about your work environment?

"Live immersed in the research project, without straying from the focus."

- O que você não gostou?

"Da frieza do ambiente de trabalho."

- What did you not like?

"From the cold social dynamic of the work environment."

- Você acha que a carga horário de trabalho foi adequada? Porque?

"A minha carga horária era eu que determinava."

- Do you think the workload was adequate? Why?

"My workload was what I determined."

- Você considera que como estrangeiro, participa da tomada de decisão referente ao projeto de pesquisa?

"Sim."

- Do you think that as a foreigner, you participated in the decision-making process regarding the research project?

"Yes."

- Quais as principais diferenças culturais você percebeu no seu ambiente de trabalho na universidade dos EUA e do Brasil?

"Maior foco na pesquisa, com cobrança por resultados."

- What major cultural differences did you notice in your work environment in US and Brazilian universities?

"Greater focus on research, with collection for results."

- Você acha que o ambiente a qual produziu sua pesquisa era mais individual ou coletivo? Porque?

"Mais individual. O grupo não era grande e não houveram muitas oportunidades de interação."

- Do you think that the environment that produced your research was more individualist or collective? Why?

"More individualist. The group was not big and there were not many opportunities for interaction."

PARTICIPANT I

"Convívio social: A falta de comunicação acaba atrapalhando amizades com nativos americanos e conseqüentemente levando a procura de amizades com outros brasileiros. Isso pode ser um problema. Segurança na amizade com brasileiros fora do Brasil pode acabar sendo prejudicial."

"Social Life: The lack of communication ends up disrupting friendships with Americans and consequently leading to the search for friendships with other Brazilians. This can be a problem. Security in the friendship with Brazilians outside of Brazil may end up being harmful."

- Como você se socializa com sua equipe de trabalho?

"Somente algumas festinhas de aniversário no próprio local."

- How did you socialize with your work team?

"Just a few birthday parties on the spot."

- Como era sua convivência fora do local de trabalho?

"Amizades com nativos, professores e alunos brasileiros. Participava ativamente de grupo religioso, com quem tenho contato até hoje."

- How was your social life outside of the workplace?

"Friendships with natives, professors and Brazilian students. I participated actively in a religious group, with whom I have contact to this day. "

- Como você foi orientado para adaptar sua cultura a do local de trabalho?

"Não fui."

- How were you oriented in how to adapt your culture in the workplace?

"I was not [oriented]."

- Você considera que como estrangeiro, participa da tomada de decisão referente ao projeto de pesquisa?

"Depende do tipo de projeto. Para o pós-doutorado, eu que enviei o projeto e quem tomava as decisões era eu mesmo. Vai depender novamente do tipo de pesquisa (doutorado, pós-doutorado, ou outro tipo de projeto)."

- Do you think that as a foreigner, you participated in the decision-making process regarding the research project?

"It depends on the type of project. For the postdoc, I managed the project and I was also the decision maker. It will depend again on the type of research (doctorate, postdoctoral, or other type of project). "

- Quais as principais diferenças culturais você percebeu no seu ambiente de trabalho na universidade dos EUA e do Brasil?

"Maturidade e respeito ao professor. Completamente diferente."

- What major cultural differences did you notice in your work environment in US and Brazilian universities?

"Maturity and respect towards the professor. Completely different."

- Você acha que o ambiente a qual produziu sua pesquisa era mais individual ou coletivo? Porque?

"Individual."

- Do you think that the environment that produced your research was more individual or collective? Why?

"Individualist."

PARTICIPANT J

- Você fala/falava a língua inglesa quando foi participar do projeto de pesquisa? Sentiu dificuldade para se comunicar?

"Já falava a língua inglesa, porque fui exchange student na adolescência e fiz o curso completo de inglês no Instituto de Cultura Brasil-Estados Unidos. Não tive dificuldade para me comunicar."

- Do/did you speak English when you participated in the research project? Did you have difficulty communicating?

"I already spoke English because I was an exchange student as a teenager and I took the full course of English at the Institute of Culture Brazil-United States. I had no difficulty communicating. "

- Como era sua convivência fora do local de trabalho?

"Muito boa, pois me comunicava bem na língua inglesa. Morei em casa de família e me entrosei bem com membros da família e amigos. "

- How was your social life outside of the workplace?

"Very good, because I communicated well in English. I lived in a family home and I got along well with family members and friends. "

- Com relação a cultura social, quais foram os pontos fortes que mais achou difícil?

"Não achei difícil de maneira alguma, pois já estava acostumada com a cultura Americana por ter vivido com uma família no intercâmbio estudantil e por ter mantido a amizade até hoje com minha família Americana e amigos, tendo ido visita-los inúmeras vezes e alguns deles também vieram ao Brasil em visita à minha família. "

- With regard to social culture, what were the points that you found most difficult?

"I did not find it difficult at all because I was already accustomed to the American culture because I lived with a family in the student exchange and for having maintained the friendship until today with my American family and friends, having visited them countless times and some of them also came to Brazil to visit my family. "

- Quando você chegou ao seu ambiente de trabalho no país anfitrião, recebeu orientações objetivas e claras sobre como executar seu trabalho?

"Não muitas. Meu orientador já havia me comunicado que eu teria uma orientação limitada, por ser muito ocupado. Mas logo me adaptei e conheci outros pesquisadores que me auxiliaram e foram, juntamente com meu orientador, parceiros em vários trabalhos. "

- When you arrived in your work environment in the host country, did you receive clear, objective guidance on how to do your job?

"Not really. My advisor had already told me that I would have limited orientation because I was too busy. But soon I adapted and met other researchers who helped me and were, along with my advisor, partners in various jobs. "

- Você foi orientado sobre como lidar com a equipe local de trabalho?

"Sim, mas de forma limitada. Tive que me adaptar à forma de eles trabalharem. "

- Were you advised on how to handle the local work team?

"Yes, but to a limited extent. I had to adapt to the way they work. "

- O que você gostou no seu ambiente de trabalho?

“De maneira geral, o coleguismo, espírito de colaboração, sem maledicência.”

- What did you like about your work environment?

“In general, the fellowship, spirit of collaboration, no slander.”

- Você acha que o ambiente a qual produziu sua pesquisa era mais individual ou coletivo? Porque?

“Era ambos. Alguns pesquisadores mais individuais, mas minha pesquisa abrangia diversas áreas e tive um bom apoio coletivo, multidisciplinário.”

- Do you think that the environment that produced your research was more individualist or collective? Why?

“It was both. Some more individual researchers, but my research covered several areas and I had good collective, multidisciplinary support.”

- Quais os impactos (positivos e negativos) que o intercâmbio trouxe para sua vida profissional?

“Impactos positivos: espírito colaborativo; facilidade em tomar decisões; contatos que perduram até hoje possibilitando apoio em pesquisas. Impactos negativos: nenhum.”

- What impacts (positive and negative) did the exchange bring to your professional life?

“Positive impacts: collaborative spirit; ease in making decisions; contacts that have lasted until now enabling research support. Negative impacts: None.”

- Você considera que como estrangeira, participa da tomada de decisão referente ao projeto de pesquisa?

“Sim, tive a liberdade de opinar e tomar decisões.”

- Do you think that as a foreigner you participated in the decision-making process regarding the research project?

“Yes, I had the freedom to speak and make decisions.”

- Como o seu trabalho como estrangeira contribui para a sociedade e para a organização no país anfitrião?

“Tive mais colaboração para trazer ao meu país, do que colaboração a levar para eles. Entretanto, eles se interessavam em conhecer a situação Brasileira referente à minha área de pesquisa, porque a indústria automobilística se interessa muito pelo mercado Brasileiro.”

- How does your work as a foreigner contribute to society and the organization in the host country?

“I have had more collaboration to bring back to my country than the collaboration to bring to them. However, they were interested in knowing about the Brazilian situation regarding my research area, because the automobile industry is very interested in the Brazilian market.”

PARTICIPANT K

- Você fala/falava a língua inglesa quando foi participar do projeto de pesquisa? Sentiu dificuldade para se comunicar?

“Falava. Não tive dificuldade”

- Do/Did you speak English when you participated in the research project? Did you have difficulty communicating?

“I could speak [English]. I had no difficulty ”

- Você teve alguma palestra ou contato (férias, amigos, visita em universidade, *etc.*) com o país anfitrião antes da participação efetiva (viagem) no projeto de pesquisa? Qual?

“Sim, fiz uma visita prévia.”

- Did you have any contact (holiday, friends, university visit, *etc.*) with the host country prior to actual participation (travel) in the research project? What?

“Yes, I made a previous visit.”

- Com relação a cultura social, quais foram os pontos fortes que mais achou difícil?

“Diferente dos países latinos, não há u forte convivo social fora do ambiente do trabalho.”

- With regard to social culture, what were the strengths you found most difficult?

“Unlike Latin American countries, there is no strong social co-existence outside of the work environment.”

- Quais as principais diferenças culturais você percebeu no seu ambiente de trabalho na universidade dos EUA e do Brasil?

“Falta de convivo social fora do trabalho. Relações estritamente profissionais.”

- What major cultural differences did you notice in your work environment in US and Brazilian universities?

“Lack of social life outside of work. Strictly professional relationships. ”

- Como era sua convivência fora do local de trabalho?

“Apenas com minha família.”

- How was your social life outside of the workplace?

“Just with my family.”

- Quando você chegou ao seu ambiente de trabalho no país anfitrião, recebeu orientações objetivas e claras sobre como executar seu trabalho?

“Sim.”

- When you arrived in your work environment in the host country, did you receive clear, objective guidance on how to do your job?

“Yes.”

- Você foi orientado sobre como lidar com a equipe local de trabalho?

"Sim."

- Were you advised on how to handle the local work team?

"Yes."

- Como você foi orientado para adaptar sua cultura a do local de trabalho, inclusive a equipe (por exemplo: professores, alunos, técnicos, secretárias...)?

"Não houve considerações sobre minha cultura."

- How were you oriented in how to adapt your culture to the workplace, including with staff (e.g. professors, students, technicians, secretaries, ...)?

"There were no considerations about my culture."

- Você considera que a equipe de trabalho estava preparada para receber um integrante de outra cultura? Como você se socializa com sua equipe de trabalho?

"Sim, preparada. Tudo dentro da normalidade."

- Do you think that the work team was prepared to receive a member from another culture? How did you socialize with your work team?

"Yes, prepared. Everything within normalcy."

- Você acha que o ambiente a qual produziu sua pesquisa era mais individual ou coletivo? Porque?

"Individual. Varias pessoas desenvolvendo seus trabalhos."

- Do you think that the environment that produced your research was more individualist or collective? Why?

"Individualist. Several people developing their work."

- Você considera que como estrangeiro, participa da tomada de decisão referente ao projeto de pesquisa?

"Do meu projeto de pesquisa sim, do grupo que estou vinculado não."

- Do you consider that as a foreigner, you participated in the decision-making process regarding the research project?

"For my research project, yes, for the group I'm linked to, no."

- Como o seu trabalho como estrangeiro contribui para a sociedade e para a organização no país anfitrião?

"Muito pouco. Apenas para a internacionalização da universidade em que me encontro."

- How does your work as a foreigner contribute to society and the organization in the host country?

"Very little. Only for the internationalization of the university in which I find myself."

INDEX B

UNIVERSIDADE FEDERAL DE ITAJUBÁ

PROGRAMA DE PÓS GRADUAÇÃO EM ENGENHARIA DE PRODUÇÃO

INSTRUMENTO DE COLETA DE DADOS EM ENTREVISTA SEMIESTRUTURADA

Mestrando: Justin Michael Hansen

Minha pesquisa terá como objetivo analisar as percepções dos participantes de projetos de pesquisa entre Brasil-Estados Unidos, com o intuito de identificar como se deu o processo de adaptação e trabalho dos profissionais; caracterizar qualidade de vida no trabalho para o pesquisador/aluno; identificar a relação entre a percepção de sucesso na projeto de pesquisa internacional e a percepção de qualidade de vida para pesquisador; caracterizar as dimensões que contribuem para uma percepção positiva ou negativa dessa forma internacional de projetos.

Portanto, convido-o (a) a participar da etapa da entrevista semiestruturada, que é uma ferramenta de coleta de dados essencial para a pesquisa apresentada. O sigilo quanto ao nome e qualquer dado pessoal dos participantes será mantido, e as respostas dadas só serão utilizadas para o objetivo de compreender as motivações para a participação no projeto e entendimento de qualidade e adaptação. Se tiver qualquer dúvida, sinta-se livre para entrar em contato particular.

Todos os dados coletados somente serão utilizados para esta pesquisa e divulgação acadêmica de seus resultados, sendo que em nenhum momento serão identificados os nomes ou dados pessoais dos participantes;

- a) Não existem riscos em potencial para os participantes pesquisados;
- b) O procedimento desta pesquisa e de que se eu tiver dúvidas em relação a ela, aos seus procedimentos, riscos e benefícios, você tem o direito de contatar o pesquisador visando esclarecimentos.
- c) Não haverá nenhum custo para o participante desta pesquisa.
- d) Os benefícios advindos deste estudo serão em termos de produção de conhecimento na área, a fim de propiciar desenvolvimento da psicologia como ciência e profissão.

Muito obrigado

PERFIL DO ENTREVISTADO		
Email:		
Sexo: ()M ()F	Idade: () 20 a 31 () 31 a 41 () 41 a 50 () Acima de 50	Local de Nascimento (Cidade/Estado):
Formação Acadêmica:		
Estado Civil:		
Etnia:	Religião: Praticante: () Sim () Não () Mais ou menos	
Com quem você reside? (se residir com outras pessoas, quem?)		
Em quantos países já participou de pesquisas/trabalhos: () 1 () 2 () 3 () 4 () +4		
Se casado:		
Profissão do Cônjuge:		
O cônjuge trabalha no país anfitrião?		
Se tiver filhos:		
Quantos filhos?		
Qual a idade dos filhos e sexo:		
Idade:	Sexo: () M () F	
Idade:	Sexo: () M () F	
Idade:	Sexo: () M () F	
Idade:	Sexo: () M () F	
Idade:	Sexo: () M () F	

PREPARAÇÃO INTERCULTURAL

1. Quantas vezes você participou de projetos de pesquisas?

1.1. Qual local você participou/a do projeto? (Empresa/Universidade e Cidade/Estado)

2. Numa escala de 0 a 10 – sendo 10 o mais avançado – qual nível de inglês você considera ter quando participou/a do projeto de pesquisa nos Estados Unidos?

2.1 Sentiu dificuldade em se comunicar?

2.2 O que considera a maior dificuldade em se comunicar?

3. Você teve algum contato (férias, amigos, visita em universidade, *etc.*) com o país anfitrião antes da participação efetiva (viagem) no projeto de pesquisa?

() Sim () Não

3.1. Qual e como foi realizada?

ADAPTAÇÃO

1. Em uma escala de 0 (zero) a 10 (dez) quais seriam os fatores que mais considera importante no processo de adaptação:

- Convívio social:
- Alimentação:
- Religião:
- Política/Burocracia:
- Segurança:
- Clima:
- Comunicação:
- Distância da Família:
- Legislação e regras (transito, bebidas,...):
- Outros: (Quais?)

2. Levando em consideração o grau aplicado na pergunta anterior, comente o **PORQUÊ** de você ponderar maior ou menor influência na adaptação de acordo com sua experiência.

- Convívio social:
- Alimentação:
- Religião:
- Política/Burocracia:
- Segurança:
- Clima:
- Comunicação:
- Distância familiar:
- Legislação e regras (transito, bebidas,..)
- Outros: (Quais?)

FAMÍLIA E CICLO SOCIAL

Como era sua convivência fora do local de trabalho?

Como você fazia para se desligar do seu ambiente de trabalho e relaxar?

Como você lidava com a distância da família e dos amigos no Brasil (Em casos em que a família não foi junto)?

ADAPTAÇÃO NO TRABALHO

1. Em uma escala de 0 (zero) a 10 (dez) quais seriam os fatores que mais considera importante no processo de adaptação:

- Orientação para execução do trabalho:
- Interação com a equipe:
- Carga horária:
- Participação em tomada de decisões:
- Desenvolvimento de novas habilidades (aprendizado):
- Preparo da equipe para receber um estrangeiro:

1.2 Qual foi a orientação de trabalho no país anfitrião que recebeu sobre como executar seu trabalho?

1.3 Como você foi orientado sobre como lidar com a equipe local de trabalho?

1.4 Como você foi orientado para adaptar sua cultura a do local de trabalho?

- 1.5 Você teria algum elogio ou queixa sobre o ambiente de trabalho? Quais?
- 1.6 O que você gostou no seu ambiente de trabalho?
- 1.7 O que você não gostou?
- 1.8 Você acha que a carga horário de trabalho foi adequada? Porque?
- 1.9 Você considera que como estrangeiro, participa da tomada de decisão referente ao projeto de pesquisa?
- 1.10 Como o seu trabalho como estrangeiro contribui para a sociedade e para a organização no país anfitrião?
- 1.11 Quais as **novas habilidades** ou conhecimentos que você considera ter desenvolvido após seu intercambio?
- 1.12 Você considera que a equipe de trabalho estava preparada para receber um integrante de outra cultura?
- 1.13 Como você se socializa com sua equipe de trabalho?
- 1.14 Quais as principais diferenças culturais você percebeu no seu ambiente de trabalho na universidade dos EUA e do Brasil?
- 1.15 Você acha que o ambiente a qual produziu sua pesquisa era mais individual ou coletivo? Porque?
- 1.16 Quais os impactos (positivos e negativos) que o intercambio trouxe para sua vida profissional?

INDEX C

To all UNIFEI professors and students who are interested in taking on academic research abroad, international coursework or any other such academic endeavors overseas, it is the intent of this document to help guide any future research or otherwise academic opportunities sought outside of Brazil. The considerations to follow are greatly based on research that was conducted here at the UNIFEI by an international student who interviewed participating Brazilian professors in an attempt to evaluate the degree to which cultural influence is having an impact on international research. The fundamental basis of this research was related directly to the ever-increasing global world that is experiencing more exchanges among people and workers than ever before.

It has been recently acknowledged in the academic world that such international cooperation is not only meaningful to those involved directly in them, but also to the academic world at large as well as society since international research and projects ultimately go on to indirectly affect many other people than just those involved directly. The study was carried out over the course of two years from 2017-2018 and involved UNIFEI professors/researchers who had previously, or who were at that time, living in the United States working on postdoctoral research projects. As the study was focused on US cultural impact on Brazilian professors/researchers, the following suggestions are perhaps most beneficial to those who are interested in living and studying or conducting research in the US as well. However, many insights were gained from this study that can be applied as fundamental preparation points that are relevant to the adjustment phase in any country, regardless of where such an international endeavor may take place.

Throughout the evaluation and discussion of the study, it was seen that language preparation and ability were fundamental to the overall success and comfort level of the participants involved. Several of the professors that participated in the study reported that language was more fundamental and essential in their everyday lives than they could have ever imagined. This held true not only in the context of the professors' academic lives, but also in their personal and social lives outside of their professional lives at the respective universities at which they conducted their research. Examples of professors who had lived in the US prior to their postdoctoral experiences who did exceedingly well and felt comfortable in their work environments and social circles outside of work, along with professors who reported going to the US not being able to speak English very well and feeling that they could have been more

successful and would have had a more interactive social life, were found in the research. Additionally, there were reports of participants who lived within a close proximity of other Brazilians and because of this failed develop their English to an adequate level due to excessive contact with their native Portuguese. Thus, for all of these reasons, it is highly recommended that one give special attention to language preparation before living abroad in order to maximize their opportunity.

Another important aspect that was evaluated in the study, was the participants' marital and family situations. In general, it was consistently demonstrated that the participants who were married and had kids were happier and more successful in their work when their families went to the US with them. On the other hand, distance between families for an extended period of time was shown to be stressful for participants involved in academic research and international projects in addition to having an effect on their work. It seemingly took away from their desire to socialize and participate in the local culture of the place where they are living as well.

Additional factors that were reported in the aforementioned study that demonstrated a measurable effect, were weather, laws and politics. Weather in some cases was not of the least concern for participants as they lived in more southern parts of the US where the weather is comparable to that of Brazil. However, many participants reported that the brutally cold winters of the northern regions were "never ending." Thus, it is recommended that for future participants of such international academic endeavors, a certain level of familiarization with the weather in the specific area of interest be undertaken in order to be prepared for what to expect. This is particularly important for those going to countries in the Northern Hemisphere as the seasons differ in respect to the time of year in which they occur.

In the case of the Brazilian professors in the study and US politics, a tendency towards more comfort was shown by those who lived in the US during the time of a Democratic presidency as opposed to a Republican presidency. Likewise, the participants who showed the most concern about politics were those that stayed in the US during a Republican presidency.

In terms laws and the practice of law enforcement as experienced by the participants of this study, the two main differences pointed out were driving laws in general, and open-container laws regarding alcohol. Alcoholic beverages of any sort are absolutely prohibited in all parts of the US and police officers regulate this rigorously. As such, driving laws are also enforced very strictly and police officers can be found on the roads at any time, even out of

plain view in some cases. It is very important for drivers to respect the law and drive with caution in the US in order to avoid problems with traffic violations.

INDEX D

Para todos os professores e estudantes da UNIFEI que estiverem interessados em fazer pesquisas acadêmicas no exterior, cursos internacionais ou qualquer outro contato acadêmico no exterior, a intenção deste documento é ajudar a orientar qualquer pesquisa futura ou oportunidades acadêmicas fora do Brasil. As considerações a seguir são baseadas em uma pesquisa realizada na UNIFEI por um(a) estudante internacional que entrevistou professores brasileiros com o intuito de avaliar o grau de impacto que a influência cultural tem na pesquisa internacional. A base fundamental desta pesquisa foi relacionada diretamente ao crescente mundo global que diversas pessoas vêm experimentando nos intercâmbios.

É reconhecido no meio acadêmico, que tais cooperações internacionais não são apenas significativas para os envolvidos diretamente nelas, mas também para o mundo universitário em geral, bem como para a sociedade, uma vez que pesquisas e projetos internacionais afetam indiretamente muitas outras pessoas. O estudo foi realizado no decorrer de dois anos, de 2017 a 2018, e envolveu professores / pesquisadores da UNIFEI que anteriormente, ou que na época, viviam nos Estados Unidos, trabalhando em projetos de pesquisa de pós-doutorado. Como o estudo foi focado no impacto cultural dos EUA em professores / pesquisadores brasileiros, as sugestões a seguir são talvez mais benéficas para aqueles que estão interessados em viver e estudar ou realizar pesquisas nos EUA. No entanto, muitos *insights* foram obtidos a partir deste estudo que podem ser aplicados como pontos de preparação relevantes para a fase de ajuste em qualquer outro país, independentemente de onde tal empreendimento internacional possa ocorrer.

Ao longo da avaliação e discussão do estudo, observou-se que a preparação e habilidade linguística foram fundamentais para o sucesso geral e nível de conforto dos participantes envolvidos. Vários dos professores que participaram do estudo relataram que a língua era mais fundamental e essencial em suas vidas cotidianas do que jamais poderiam ter imaginado. Isso se manteve verdadeiro não apenas no contexto da vida acadêmica dos professores, mas também em sua vida pessoal e social fora de suas vidas profissionais nas respectivas universidades nas quais realizaram suas pesquisas. Exemplos de professores que viveram nos EUA antes de suas experiências de pós-doutorado, que se saíram muito bem e se sentiram confortáveis em seus ambientes de trabalho e círculos sociais fora do trabalho, junto com professores que relataram ir aos EUA sem poder falar inglês muito bem e sentindo que eles poderiam ter tido mais sucesso e teriam tido uma vida social mais interativa, foram encontrados na pesquisa. Além disso, houve

relatos de participantes que viviam próximos a outros brasileiros e, por causa disso, não conseguiram desenvolver o inglês a um nível adequado, devido ao contato excessivo com sua língua nativa. Assim, por todos esses motivos, é altamente recomendável que se dê atenção especial à preparação do idioma antes de morar no exterior para maximizar a oportunidade.

Outro aspecto importante que foi avaliado no estudo, foi a situação conjugal e familiar dos participantes. Em geral, foi consistentemente demonstrado que os participantes que eram casados e tinham filhos eram mais felizes e mais bem-sucedidos em seu trabalho quando suas famílias iam para os EUA com eles. Por outro lado, a distância entre as famílias por um período prolongado de tempo, mostrou-se estressante para os participantes envolvidos em pesquisas acadêmicas e projetos internacionais, além de ter um efeito sobre seu trabalho. Isso aparentemente tirou o desejo de socializar e participar da cultura local do lugar onde eles viviam também.

Fatores adicionais que foram relatados no estudo, que demonstraram um efeito significativo, foram: o clima, as leis e a política. O clima, em alguns casos, não era de menor importância para os participantes, pois viviam em regiões mais ao sul dos EUA, onde o clima é comparável ao do Brasil. Porém, muitos participantes relataram que os invernos brutalmente frios das regiões do norte do país estavam "sem fim". Assim, recomenda-se que seja realizado um certo nível de familiarização com o clima na área específica de importância para os futuros participantes de tais interesses acadêmicos internacionais. É importante lembrar, também, a quem pretende ir para o hemisfério norte que as estações do ano são opostas às do hemisfério sul.

No caso dos professores estudados e o fator político dos EUA, houve uma tendência de conforto por aqueles que viveram nos EUA durante o período de presidência democrática. Da mesma forma, os participantes que mostraram mais preocupação com a política foram aqueles que permaneceram nos EUA durante uma presidência republicana.

Em termos de leis e da prática de aplicação da lei, conforme experimentado pelos participantes deste estudo, as duas principais diferenças apontadas foram as leis de condução em geral, e as leis de “*open container*” (contêineres abertos) em relação ao álcool. Na qual bebidas alcoólicas de qualquer tipo são absolutamente proibidas em todas as partes dos EUA e policiais regulam isso rigorosamente. Sendo assim, as leis de condução também são aplicadas de forma muito rigorosa, e os policiais podem ser encontrados nas estradas em qualquer momento, até mesmo fora de vista em alguns casos. É muito importante que os motoristas

respeitem a lei e conduzam com cautela nos EUA para evitar problemas com infrações de trânsito.

APPENDIX A

FURTHER CONSIDERATIONS FOR UNIFEI

In light of this research, and in reflecting on my experience as a master's degree student at the Federal University of Itajubá, I would like to acknowledge some particular areas of interest in which I believe that the university could improve on its already strong tradition in research and student / professor outreach. The first of these considerations came to my attention when I began to conduct my research for this study. I was certain that ethically speaking, I would have to abide by some sort of code of conduct or at the very least sign an agreement form and ask my participants to do the same as personal information and experiences were being gathered for analytical purposes. I was surprised to find out, however, that this was in fact not necessary. My advisor also informed me that there is no such policy that exists in the department of Production Engineering. In discovering this, I would like to suggest that something in the realm of a consent form or ethical agreement form be developed for future students that take on such research that involves personal experiences of the participants involved.

In addition to this observation, I learned a lot about the importance of preparation, specifically regarding language but also regarding cultural and behavioral preparation in general, in the context of international projects and international student and teacher development. This knowledge was transmitted to me both from the perspective of a student (as I was) and from the perspective of the researchers that were so kind as to participate in this study. As such, a document has been prepared (see Index C for English and Index D for Portuguese) with a discussion of considerations for all future professors and students who decide to partake in any such academic endeavors outside of Brazil. Special regard to the experiences reported in this research has been highlighted in this document in order to guide the orientation and possibilities of preparatory considerations for such individuals in the years to come at UNIFEI.

It is with my kindest regards and deepest consideration that these suggestions are made based on the knowledge acquired and discussed in this study. I thank all parties involved in the evaluation of these considerations.

APPENDIX B

CONSIDERAÇÕES ADICIONAIS PARA A UNIFEI

A respeito dessa pesquisa, e refletindo sobre minha experiência como mestrando na Universidade Federal de Itajubá, gostaria de destacar algumas áreas de interesse particular nas quais acredito que a universidade poderia melhorar sua tradição em pesquisa que já está forte. A primeira dessas considerações chegou ao meu conhecimento quando comecei a conduzir minha pesquisa para este estudo. Eu tinha certeza de que, eticamente falando, eu teria que obedecer a algum tipo de código de conduta ou, no mínimo, assinar um formulário de acordo e pedir aos meus participantes que fizessem o mesmo como informações pessoais e experiências fossem coletadas para fins analíticos. Fiquei surpreso ao descobrir, no entanto, que isso não era de fato necessário. O meu orientador também me informou que não existe tal política no departamento de Engenharia de Produção. Ao descobrir isso, gostaria de sugerir que algo no âmbito de um formulário de consentimento ou de acordo ético seja desenvolvido para futuros alunos que realizem tais pesquisas envolvendo pessoas com o intuito de evitar questionamentos futuros e/ou mesmo perda de publicações por falta de parecer ético.

Além dessa observação, aprendi muito sobre a importância da preparação, especificamente em relação à linguagem, mas também em relação à preparação cultural e comportamental em geral, no contexto de projetos internacionais e desenvolvimento internacional de estudantes e professores. Esse conhecimento me foi transmitido tanto da perspectiva de um aluno (como eu era) quanto da perspectiva dos pesquisadores que tiveram a gentileza de participar deste estudo. Como tal, um documento foi preparado (veja o Índice C para o inglês e o Índice D para o português) com uma discussão de considerações para todos os futuros professores e estudantes que decidam participar de tais experiências acadêmicas fora do Brasil. A consideração específica sobre as experiências relatadas nesta pesquisa foi destacada nos documentos citados acima, com o intuito de orientar sobre as possibilidades que podem ser enfrentadas pelos indivíduos que pretendem participar de projetos de pesquisas internacionais nos próximos anos na UNIFEI.

Dessa forma, é com os meus mais bondosos cumprimentos e profunda consideração que estas sugestões são feitas com base nos conhecimentos adquiridos e discutidos neste estudo. Agradeço a todas as partes envolvidas na avaliação dessas considerações.