INTERCULTURAL COMMUNICATION AND ITS CHALLENGES WITHIN THE INTERNATIONAL VIRTUAL PROJECT TEAM

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Abstract. With the advance of technology, face-to-face intercultural communication moves into the online virtual environment via electronic tools such as audio-video conferencing, email, messenger chat, platforms, groups, thus distances between individuals from different cultures are reduced and the exchange of information takes place within a few seconds. Cultural differences should not be a barrier to communication but an opportunity for development. International virtual project teams (IVPTs) can benefit from cultural diversity and effective intercultural communication, because it can enhance creativity and innovation within the project team, while at the same time team members are enriched by acquiring intercultural information and developing intercultural skills. So, it becomes mandatory to understand how intercultural communication takes place in a virtual environment, which are the most important challenges and how they can be overcome. This paper aims to highlight the importance of an effective intercultural communication, the role of intercultural communication skills and which are the characteristics of intercultural communicators. In order to analyze some cultural diversity aspects within IVPTs (number of project languages used, efficiency of different online collaboration tools, misunderstandings generated by cultural diversity), an empirical research was conducted, through an online survey within 107 IVPT members. Data was analyzed using descriptive statistics through IBM SPSS Statistics software.

1 Introduction

Cultures can be defined through the system of values and beliefs as well as through the behavior or actions of the members of the group to which that culture belongs. People who belong to the same culture are generally guided by the same values and beliefs. The values of a specific culture determine a series of expectations and rules that indicate how they should behave within that culture. Although many people are considered to be single individuals, members of the same culture tend to have a similar pattern of behavior.

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Regarding the system of verbal symbols, usually within a culture there is a dominant code, represented by the official language, to which are added different verbal styles: directly, personally or indirectly, impersonal. Within an international project, these differences can largely be overcome by establishing a single language of communication within the project, as well as selecting members with a high level of oral and written communication skills in that language. The nonverbal code system includes the use of body language, gestures, facial expressions, voice, smell, personal and geographic space, time and artifacts [1]. Within IVPTs, part of the symbols of this system are canceled, given that most of the communication is carried out through electronic tools. The type of electronic tools used, depending on the activity of the project or what it wants to communicate, will allow for a greater or lesser presence of nonverbal elements.

Technology reduces the distance between individuals from different cultures and societies, allowing connections to be established in just a few seconds. The primary effect of technology is the decentralized role in disseminating information across local, regional, national and international boundaries. Although technological advancement facilitates the initiation and maintenance of transcultural relations, history shows that the hostility of a group of people towards another group that is different from a cultural, religious, ethnic or linguistic point of view is one of the most important human predispositions. Xenophobia represents fear or disdain for what is foreign or unknown, especially to strangers or perceived as strangers, and is considered to be a biological innate response to intergroup competition. There must be a common goal to unite these people, otherwise tribal hostilities will remove them [1].

The greatest benefit of accepting cultural differences is that cultural diversity enriches each of us. Over time, individuals around the world have accumulated important cultural traditions and customs, but they are often unaware that customs vary from country to country. The key to appreciating cultural differences is the acquisition of intercultural information and the development of intercultural skills. By understanding the beliefs, values, and visions of the world that influence alternative approaches to communication, individuals can understand the logic of motivating the actions or behaviors of others who are differently cultural to them. Cultural differences should not be a barrier to communication, but an opportunity for self-development. Intercultural communication helps individuals develop their knowledge of others and their cultures and, at the same time, consolidates their own culture information. The result is a much greater intercultural understanding [2].

Doctor Edward T. Hall is considered to be the first to use the term "intercultural communication" in his work [1]. Intercultural communication occurs when project team members from different cultures are forced to communicate, exchanging between them both verbal and non-verbal messages that contain cultural elements and social perceptions. “Intercultural communication often involves the use of a language other than native language, with at least one of the interlocutors using a different language than the native language.

True intercultural communication goes beyond mere exchange of information and narrow conceptions of cultural membership, where culture is reduced to nationality, and variations in cultural groups are largely ignored. Intercultural communication focuses on verbal and nonverbal behaviors, attitudes and perceptions of people from different cultural and linguistic backgrounds that interact with each other” [3].
2 Literature review

2.1 Intercultural communication and virtual project teams

According to Fig. 1, intercultural communication takes place between a variety of contexts, including cultural, micro-cultural, environmental, perceptual and socio-relational. The environment was noted in Fig 1 as virtual, being specific to IVPTs.

![Figure 1](image_url)

**Fig 1.** The model of intercultural communication in the virtual environment. *Source: adaptation after Neuliep, James, W., Intercultural Communication, A Contextual Approach, Seventh Edition, p. 19, Sage Publications, Inc., USA, 2018.*

The term 'context' refers to the situation, circumstances and, in general, the entire setting in which the communication takes place [1]. When team members interact with the virtual environment, this takes place in the virtual environment created by electronic tools. Through video-audio meetings, team members only partially perceive the physical environment of the interlocutor. They also interact in a socio-relational context, for example, team-mate – team-mate or team-mate - team manager. In terms of the cultural context, represented by the outer circle in the picture, it indicates that any kind of communication between two people takes place within a culture. Micro-cultures are smaller groups within larger cultures, due to differences in ethnicity, race, spoken language. The perceptual context refers to the individual characteristics of each individual interacting, including knowledge, attitudes, mood and motivations. Specifically, the perceptual context refers to how an individual collects, stores and recovers information. These actions based on the senses are fundamentally human-specific but are influenced by culture [1].

Due to the complexity of this process, a fundamental hypothesis about intercultural communication is that the message sent is not, as a rule, the message received. A cause for message distortion could be ethnocentrism, which can be understood as the basis of patriotism, loyalty to the group, and the desire to sacrifice for our own group [1]. A very high level of ethnocentrism can be problematic, representing an obstacle to effective intercultural communication. Anthropologist Edward T. Hall said that humans are ethnocentric by nature, which means that other cultures are analyzed and judged, based on native culture, considered the standard culture. So, no individual in a particular culture can draw conclusions to values, behaviors, customs, traditions of another culture without being biased [4].

“Cultural differences, represented by norms, values and behaviors, play a very important role in team building, decision making, work satisfaction, marketing and promotion, and many other aspects of the global economic environment. Some intercultural misunderstandings can be funny, others are badly disturbing. That is why there are great difficulties in translating practices, products or promotional campaigns into different
cultures. Languages are complex and nuanced repertoires of culture. The language, both verbally and nonverbally, conveys significance about the values, beliefs, presumptions of a culture. Transcultural translations can lead to confusion, misunderstanding and communication failure, when culture, as a system of meanings, is not understood [5] (pp. 75-76).” Language is perhaps the most important element of intercultural communication. When communication and interaction are involved, team members must be particularly sensitive to cultural differences in communication styles and establish who should initiate comments or questions, who should moderate disagreements or debates, which is the level of formality considered appropriate [6].

In a multicultural collaboration environment, such as the IVPT, English is most often chosen as an official language of communication. Fig. 2 shows that English is the most commonly used (as a result of the number of internet users and speakers of English as a non-native language), followed by Chinese. Many of the professional and educational webpages use English, which means that those who do not master that language or other international language have limited access to information or opportunities for professional, educational development etc. Under these circumstances, these individuals have limited intercultural and international contact in the virtual environment. If English is not the native language for the entire team or just for some team members, they should be informed about the possible limitations of such a situation.

Fig 2. The first 10 languages used in cyberspace in 2017. Source: Internet World Stats, http://www.internetworldstats.com/stats7.htm

However, intercultural communication is, first of all, a nonverbal act among individuals. Some foreign language teachers consider that competence in a foreign language equates to an effective intercultural communication in the culture that speaks the language. Surely, competence in a foreign language accelerates the experience of intercultural communication, but intercultural communication is fundamentally a nonverbal process [1] (p. 21).

2.2 Challenges of intercultural communication

“Team members from the virtual environment can encounter numerous challenges due to cultural differences. These differences can influence team members' attitudes towards communication, sharing of information, leadership and status of team members” [7]. Intercultural conflicts can be defined as a perception of the incompatibility between cultural values, situational norms, objectives, guidelines, limited resources, different styles and processes. Different behaviors, such as unfamiliar communication styles, different polite expressions, can make communication and negotiation situations more difficult when there is a second language of communication.
Ethics can be defined as a guide to the principles of conduct of individuals and groups. Essentially, the ethical and moral environment in which we live determines what is acceptable or unacceptable, admirable, or despised, shapes our emotional responses, creating states of pride, shame, anger, gratitude. The code of ethics represents guidelines that indicate what is good or bad in everyday life or in the professional environment [3] (p. 52). We meet ethical codes in each culture that are passed on by friends, family, society, and also religious codes of ethics. These fundamental notions of good and evil affect both the everyday life of every individual and his behavior towards those with different traditions or beliefs. These differences can lead to non-ethical, racist or sexist behaviors or language, to people's labeling or denigration. Even when virtual team members are motivated and willing to participate in information sharing, communication challenges can arise due to differences in communication styles typical of each culture, some cultures being very direct in verbal communication, while others rely on communication, above all, indirect. Individuals using a direct style will communicate what they want without ambiguity, while team members with an indirect style will communicate in a circular manner, not specifying clearly what they want. Such differences can lead to misunderstandings, feelings of frustration, nervousness, disrespect, having the potential to be transformed into conflicts within the virtual teams [8]. For example, some team members need to know how to express their dissatisfaction that they need to wake up very early, or work late or on different national holidays to run team meetings. And the other team members need to empathize and accept a compromise on the timing of the team meetings.

The bigger the differences between IVPT members, the more likely it is for individuals to communicate more frequently or more efficiently with those in similar cultures, creating different groups. These groups may also be harmful when certain stereotypes of superiority are created, the members of a group being considered superior to those outside it and may affect the performance of the team [8].

2.1 Solutions

In our opinion, the challenges of intercultural communication can be greatly diminished, avoided or overcome, through a thorough training of IVPT members based on intercultural communication, with an emphasis on the individual cultures of the project team members prior to the start of the project, but also during its development, if the project manager observes some communication problems or conflicts within the team. “The 1999 International Business Trend Report identified three core competencies for the twenty-first century global work: intercultural communication skills, problem solving skills and global leadership. When money and jobs cross the borders, there are challenges and opportunities faced by individuals from different backgrounds living and working together ” [2] (p. 59).

Jackson Jane [3] believes that the exposure of individuals to different beliefs, practices, together with critical reflection on their own attitudes and intercultural behaviors, can propel them to high levels of intercultural competence. Improving intercultural communication skills means building consciousness about ourselves and learning as much about individuals who speak a different language and have different values and habits. According to Jackson Jane [3], the characteristics of ethical intercultural communicators are as follows:
- believe that people are equal, even if their beliefs and values are different;
- actively interact with people from different groups (ethnic, religious, gender, linguistic, disabled, etc.);
- listen actively and refrain from judging negatively the behavior of people from different cultural or linguistic backgrounds;
- question patiently to confirm the meaning of the message;
- acknowledge that misunderstandings may arise due to linguistic and/or cultural differences;
- ask and offer their feedback (verbal and nonverbal) to ensure that messages have been received and understood correctly;
- make a real effort to learn the language and practices of people from different cultural backgrounds;
- their perspective is based on the fact that people from different cultural backgrounds have rational behavior when understood in situational and cultural contexts;
- value intercultural cooperation and peaceful conflict mediation;
- recognize diversity in cultural groups and are aware that no individual can represent an entire community or culture;
- aim to include all views in intercultural interactions;
- treat with respect and dignity individuals belonging to other cultures.

To these features, we still add those identified by Anawati and Craig [9], who have analyzed the importance of behavioral adaptation, especially when it comes to interacting between team members in the virtual environment because they need to adapt their styles and communication strategies when using electronic tools so that the message has the desired result:
- awareness and acceptance of cultural differences, such as: understanding of silence, praise and criticism;
- avoid slogan, collocation, jargon, acronyms, because they do not translate very well for non-native speakers;
- avoiding humor and irony, as such remarks can be interpreted negatively or erroneously in some countries;
- it is necessary to speak rarely and clearly;
- changing voice tones in audio and video conferencing to make sure it is not too loud, but not too low;
- religious differences, such as religious holidays and beliefs in other countries, should be taken into account;
- adaptation to areas with different time-zones. The project manager must ensure that no team member is continually affected by inadequate (too early or too late) hours set for virtual meetings; it would be best to set the hours set for meetings to rotate to ensure a fair distribution, covering all areas of the team members from the virtual environment.

For effective communication and to avoid conflicts within IVPTs, we believe that these features are fundamental to each team member, and team managers will need to include them in the selection process.

As a result of the above, the research assumptions are:
1. Effective intercultural communication is supported by the choice of a single language of communication within the international project;
2. Cultural diversity influences issues such as decisions on motivation techniques and the choice of online collaboration tools;
3. Specific training courses help to enhance the intercultural communication skills of IVPT members.

3 Methodology

The research tool is the self-administered questionnaire created through Google Forms and sent to the subjects as an access link via e-mail, but also through the Linked-in professional social networking and facebook instant messaging tool, because it was observed a much higher response rate through them. The choice of this tool is motivated by the low costs, the
availability of subjects, the high rate and speed of response, and the streamlining of data centralization time.

The survey questionnaire was structured, theoretically, in seven parts, including cultural diversity within IVPTs.

The universe of the population comprises individuals who have been working or are operating within an IVPT.

The sample is non-probabilistic (non-random), because the probability that a member of the population selected to be selected in the sample can not be determined, given that there is no official data on the total population. The selection was rational [10] based on the interviewer's reasoning that the respondent represents the population of interest, but also the "snowball" technique, where the research participants recruits other members for the study [11], such as teammates from the same project. As the total collectivity is not known, the size of the non-aleatory sample was established in such a way as to achieve the objectives of the study, taking into account the sampling base, the available budget and the time available. Under these circumstances, the margin of error and the confidence level are impossible to calculate because it applies only to random samples.

The analysis procedure for the data obtained from the survey was quantitative (statistical) due to the objectivity of the procedure and the possibility of generalizing the results. Quantitative data was collected in spreadsheets within Google Forms, which were later verified and entered into the IBM SPSS Statistics program to be analyzed in the form of nominal, ordinal and scale variables [12] to validate certain relationships of influence, using the univariate and bivariate descriptive analysis.

4 Data analysis using descriptive statistics

4.1 Sample description

Collected identification data gives us important information about the sample being studied, its representativeness and will allow us to generate matrix reports - cross-tables between different variables, identifying correlations between them.

![Fig 3. Duration of international projects involving respondents. Source: Authors.](image)

The sample is comprised of 107 respondents, 43.9% male, 59% female, and 0.9% preferred not to respond. Subjects have different nationalities - 86 Romanian, 4 Spanish and 17 other nationalities (Turkey, Pakistan, Sweden, Slovakia, Ukraine, Armenia, Malaysia, Bangladesh, India, Australia, USA, Chile, Costa Rica and Guatemala). They are part of
IVPTs, which are held over different periods - most of the respondents - 39.3% fell into the "over 18 months" category, corresponding to complex projects [13] (Fig. 3). Organizations developing these projects are part of different areas of activity, as can be seen in Fig 4.

**Fig 4.** Organization’s field of activity. *Source: Authors.*

Regarding the distribution of respondents' roles in international projects, are distinguished 36 project managers (33.6%), 24 team leaders (22.4%) and 47 team members (43.9%). Thus, 56.1% of the respondents are members of the management team (Fig. 5).

**Fig 5.** Distribution of respondents according to the position occupied in the international project. *Source: Authors.*

Distribution of respondents by level of education and position occupied within the project: the majority of respondents were grouped in the higher education category, especially at master level (43.9%, of which 11.21% are project managers) and a bachelor’s degree (42.06%, of which 16.82% are project managers). We can observe in Fig. 6 that 61.68% of respondents had more than 5 years of experience in international projects, and project managers were distributed over the top of the chart, especially in the part corresponding to 10–20 years of experience. This ensured that the data collected in this research was relevant [13].

![Diagram of Organization's field of activity](image1)

![Diagram of Distribution of respondents according to the position occupied in the international project](image2)
Fig 6. Distribution of respondents based on their experience in international projects and the position occupied within the project. Source: Dumitraşcu-Băldău, I.; Dumitraşcu, O. Research on the Behavior of Factors That Influence the International Virtual Project Team Performance, Using Data Modeling Techniques. Sustainability 11, 607, (2019).

Regarding experience in virtual teams, 37.38% of respondents had over 5 years of experience, of which 18.69% have the role of project manager (Fig. 7) [13].

Fig 7. Respondents’ distribution according to the experience in virtual teams and the position occupied within the international project. Source: Dumitraşcu-Băldău, I.; Dumitraşcu, O. Research on the Behavior of Factors That Influence the International Virtual Project Team Performance, Using Data Modeling Techniques. Sustainability 11, 607, (2019).

4.2 Results and discussion

Within IVPTs, members of different cultures meet different native languages. As a result of literature review, it was concluded that it is necessary to use a common communication language in the project to avoid or minimize misunderstandings. Fig. 8 summarizes the responses provided for the languages used by the respondents in the projects. This was an open question, and as a result of various responses, they were divided into categories and
subsequently coded for analysis. The categories identified are: 1 language - English; 2 languages (English-Spanish; English-Japanese; English-Italian; English-Romanian; English-French; German-Romanian); 3 languages (English-Italian-French; English-Italian-Romanian; English-Romanian-German; English-French-Spanish; English-Russian-Ukrainian; English-Romanian-Norwegian; English-Arabic-Urdu); 4 languages (English-Romanian-French-Italian; English-French-Spanish-Italian).

The main result, that 70.09% of respondents said they use one language in projects, namely English, supports the first assumption of this research - effective intercultural communication is based on the choice of a single language of communication within the international project.

Fig 8. Communication languages used by respondents in the international project. Source: Authors.

To question regarding the frequency of misunderstandings caused by cultural differences (Fig. 9), 24.34% of subjects responded that they occur frequently and always, and most respondents (51.40%) responded that they sometimes occur. This situation, where the majority falls within a rather neutral option, could be interpreted as a lack of awareness or a lack of knowledge in this field, in order to understand and identify that misunderstandings as being of a cultural nature. The conclusion of these results is a confirmation of the fact that misunderstandings within IVPTs exist to a considerable extent and this may be due to the lack of abilities of the IVPT members, on intercultural communication.

Fig 9. How often do misunderstandings occur within the virtual international project team due to cultural diversity? Source: Authors.

Regarding the analysis on how motivation is influenced by the national culture, the relative frequencies of the responses given by subjects are graphically represented in Fig. 10. 29.90% responded that motivation depends largely on the national culture and 42.06%
- considers that the dependence of the motivation on the national culture is a moderate one, explains the need to include the cultural aspect when different motivation techniques are used within IVPTs.

**Fig. 10.** To what extent do you consider that motivation depends on the national culture of the virtual international project team members? *Source: Authors.*

Within the question regarding the effectiveness of on-line collaboration technologies, when project team members do not have a common native language, respondents chose the main technology as video-conferencing with graphical support, desktop and file sharing features (56.07% - 'extremely efficient' and 18.69% - 'very efficient') (Fig. 11). This is explained by the fact that this type of technology reunites to a great extent all the means of communication (verbal, nonverbal, vocal and nonvocal) and a great ability to communicate (speed of response, variety of symbols, parallelism, message editing facility, storage). Thus, the shortcomings generated by the lack of physical presence can be limited or even eliminated.

**Fig. 11.** How do you rate the effectiveness of the following online collaboration technologies, when virtual team members do not have a common native language? *Source: Authors.*

These findings support the second assumption of the present research, showing that cultural diversity can influence issues such as decisions on motivation techniques and the choice of online collaboration tools.

As a result of the bibliographic research on communication within IVPT, it was have identified that the lack of cultural communication skills can lead to many misunderstandings, conflicts and, implicitly, to a decrease in the performance of the whole team, which is why training courses on intercultural communication become a necessity.
This is also confirmed by the majority of respondents (56.07%), who consider that these intercultural communication skills development trainings are "very important" and "extremely important" (Fig 12).

These results support the third assumption, which means that specific training courses help to enhance the intercultural communication skills of IVPT members.

Fig. 12. How important do you think that the training courses are, in order to enhance the intercultural communication skills of virtual project team members? Source: Authors.

5 Research limitations

Regarding the limits of current research, we must specify that sampling is non-aleatory and respondents' answers may be influenced by their training level, understanding of the terms used and of the mental state from the moment the questionnaire was completed. Also, the sample obtained from the questionnaire survey is composed mostly of Romanian nationality respondents, the other nationalities failing to form a critical mass.

6 Conclusions

In the literature it was possible to identify that multiculturality, in general, and intercultural communication, in particular, are some of the most important challenges for the IVPT management. This has led us to make an analysis of the effectiveness of electronic tools when team members use a different language than the native one, which can help IVPT managers in the process of selecting the most appropriate online collaboration technologies that intercultural communication is as effective as possible.

The result of the analysis has shown that video-conferencing with graphical support, desktop and file sharing features is the most efficient, due to the fact that this technology reunites to a great extent all the means of communication, best simulating face-to-face communication. At the same time, we have identified that motivation can be influenced by national culture, which is why the motivation strategies of the international project manager should include specific cultural features. In addition, empirical research has highlighted that challenges to intercultural communication can be overcome by developed interpersonal and intercultural communication skills that have been gained through specific training. Following the bibliographic research, we identified the most important features that team members have to hold for an effective intercultural communication, of which we note the awareness and acceptance of cultural differences.
In a future research, we will analyze to what extent IVPT members have these characteristics.

Although IVPT management challenges are extensive, it is clear that effective intercultural communication can bring great benefits: increased productivity, increased team project performance (team members work together to achieve the same goal, regardless of the culture they are part of), avoid additional project costs, conflict avoidance, personal development of project team members through tolerance towards other cultures.

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