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Cross-cultural Virtual Group Work: Cooperation vs. Collaboration (Case of Project 'X-Culture')

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Tarpkultūrinis virtualus grupinis darbas: kooperacija ir bendradarbiavimas (akademinio projekto "X-Culture" atvejo analizė)

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Abstract

The article seeks to determine when co-operation and when collaboration should be used during cross-cultural virtual group work.

For this purpose various concepts are analyzed: cross-cultural communication, virtual setting, co-operation and collaboration. An empirical quantitative research is conducted for the worldwide academic project 'X-Culture'.

Conducted research summarises the conclusions about theory's applicability in practice. Analysis reveales that majority of processes indicated in scholarly literature, as key aspects leading to collaboration throughout group development stages, are present in 'X-Culture' project. This research reveals the main differences between cooperative and collaborative group work, explaining the outcomes of both. In addition, it explains which one is applicable grounded on desired goals. Moreover, the concepts are linked to cross-cultural processes. Theoretical significance of the paper underlines the importance of building projects via collaborative or cooperative tasks considering desired goals. Practical significance offers guidelines for professional and academic institutions that organize virtual cross-cultural group work.



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KEYWORDS: cross-cultural communication, virtual setting, co-operation and collaboration.

With the help of spreading Internet connectivity and technological advancement cross – cultural virtual teams are becoming popular among companies (Holton, 2001). Other factors such as decreased numbers in business travelling and its' lengthy process also made virtual work more appealing for considerable amount of companies engaged in international activities ('Advantages and Challenges of Virtual Work Teams', n.d). To support the trend of increasing usage of cross – cultural virtual teams a research by RW3 CultureWizard was conducted in 2012. According to this research 87% of employees in multinational companies have some part of their work done virtually, but only a small part of them (16%) received some pre trainings. These numbers indicate the issue of preparing personnel for virtual cross-cultural group-work should be addressed.

Many different authors discuss and study various aspects of virtual group-work in order to better understand peculiarities of it and underlying reasons leading to its effectiveness. Webster and Staples (2006) identified the main differences of virtual and traditional face-toface teams leading to their effectiveness while examining input - process - output model of team effectiveness and classifying 200 empirical studies. In addition to this, issue of cultural differences in virtual teams was addressed by Anawati and Craig (2006) who tried to find out how members of the team adapt their activities and behavior according to cultural diversity in virtual teams. Their study 'Behavioral adaptation within cross cultural virtual teams' also presents a framework how to make the interaction of virtual teams more efficient. Sarkiunaite and Kriksciunaite (2007) focused more on human factors that have influence on the virtual teamwork. The concept of virtual teams is distinctly explained by the framework of Caya, Mortensen and Pinsonneault (2008) who overviewed research done previously as well as the linkage of it to dynamics and effectivenes of virtual team.

Virtual group-work will not be achieved without proper communication of its members. In order to achieve desired outcomes members either co-operate or collaborate and the final results depend on the efforts made. Nowak (2006) in his research indicated that co-operation is a key to openness in this global world. What is more, Peters and Manz (2007) carried out research which indicated that collaboration will improve teams' performance and innovative-ness.Vizgirdaite (2011) conducted research trying to find out the pivotal element of the term collaboration from different perspectives. Zdanyte's (2012) and O'Connor's (2012) study analyzed the effect of virtual project on students' creativity and skills of collaboration. In addition, the term might be analyzed from other perspectives like trust issues, motivation, mutual understanding or personal communication (Bersenaite, Tijunaitiene and Saparnis, 2012).

The analyzed literature reveals that even though much research has been conducted, no research focussed to investigate which - collaboration or co-operation- should be used in cross-cultural virtual group work. The received answers will assist in further planning of group work in virtual cross-cultural groups, specifically emphasizing the task structure, individual input and desired mutual group outcome. Due to this, several problem questions arise: 1) Is collaboration or co-operation necessary for virtual cross-cultural group-work? 2) What conditions should be created to achieve collaboration and co-operation in virtual cross-cultural group-work?

The aim of this research is to determine when collaboration and when co-operation should be used during cross-cultural virtual group-work.

In order to fulfill the aim of this paper, researchers analyzed various concepts: cross-cultural communication, virtual setting, co-operation and collaboration, relationships among them and possible challenges. Also empirical quantitative research was conducted on academic project 'X-Culture' seeking to find out whether processes described in theory are working in

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reality. An on-line survey was prepared in order to receive answers and it was distributed among 'X-Culture' participants.

This article consists of three parts: theoretical, which involves examination of existing literature on the selected topic, specifically researching the conception of collaboration vs. co-operation during cross-cultural group-work and team-work. The second part will provide the rationale for the research strategy and design and present the instruments used to gather the data as well as to interpret it. The third part will display the research results used to draw the conclusions.-

Conceptualising group vs. team. *Group.* Kotey (2007) claims that a group should go through the following stages: forming, storming, norming, performing and adjourning. However, for the group it is difficult to achieve great results and go through all stages successfully. This is a result of unequal members' goals, motivations and commitment (Petress, 2004). Thus, a group is more individualistic unit and lacks something that would glue them together for one aim.

Optimal amount of people in a group should be three to five individuals. According to Petress (2004), a bigger group might result in free-riding, unequal job distribution and reduction in each participant's responsibility. Unequal participation of group members might result in lack of trust and tension among the members creating unpleasant atmosphere to work in. Due to lack of commitment in a group, clear norms should be defined. They include: attendance to meetings, respect for the deadlines and effort from each member (Houldsworth and Mathews, 2000). However, Hall (2008) claims that groups are far easier to set up, easier to run and sometimes even more pleasant to work in.

Team. 'Team' has a lot of definitions and is regarded as 'a group of people who must rely on co-operation and collaboration for each member is to achieve optimum success and goal achievement' (Dyer, 1977). Hackman (1990) describes a well functioning team characteristic as 'a collective task that demands a high level of interdependency among members, something that can only be accomplished together'. According to Dollinger, (1999) 'team represents a small group of people sharing the same aim, goals, purpose and mutual commitment to the outcomes of the task'. It is easy to see what is common between these descriptions – collaboration, interdependency, shared goals, aims and understanding that being single will not help to achieve the best results. If one of the components is missing then a well functioning team is not going to be formed, desired outcomes not achieved and completion of the task will be difficult.

As the conception of both group and team is clear, Table 1 presents the main differences between group and team in order to have a better picture and use these terms properly.

Group	Team		
Individual accountability;	Individual and mutual accountability;		
l focus;	We focus;		
Purpose, goals, approach to work shaped by manager;	Purpose, goals, approach to work shaped by team leader with team members;		
Concerned with one's own outcomes and challenges;	Concerned with outcomes of everyone and challenges the team faces;		
Independence.	Interdependence.		

Table 1

Comparison of group and team characteristics



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Group's transformation to a team. Examples of team definition presented in previous section reveal that every team at the beginning is a group, so in this section group transformation to a team is going to be presented, emphasizing on: leadership, accountability, problem solving attitude, and the high performance curve.

Strong leadership is crucial in every team (Kinicki and Kreitner, 2006). It is important to note that the meaning of leadership has changed, now leaders are perceived as advisers, mediators not dictators. Kotze (2006) identified leader's role as 'ask them', not 'tell them', which means that leaders should debate with a group before making final decisions. When your group members feel that their opinion matters and they are able to express their opinion freely they will commit to a common purpose and common goals. If a team leader is able to do this, he will create conformity in a team and it will allow team members to make relationships with others in a team (El-Meligi, 2012). Some people believe that leaders should be able to do all tasks perfectly, however, they are just like other members. Leaders should know how to combine all the best qualities of each team member in order to achieve common goals. Another leader's responsibility is to take initiative and set example for the others (Kotze, 2006). Balancing between dictator and advisor is one of the hardest tasks of being a leader.

In most cases in a group everyone is accountable for their own part and that is it. However, in order to become a team each individual should feel responsibility for their tasks as well as for the whole teams' performance (El-Meligi, 2012). This step is easier said than done as behind mutual accountability lies other factors such as trust which takes time to develop. According to El-Meligi (2012), people face trust issues from the first face-to-face encounter. It is very hard to change the first impression if a person seems unreliable. It is even harder to achieve mutual accountability when a team is formed only for a short time and they have to produce results fast. Failure in achieving trust might result in conflicts, destroyed development and growth of the team (Kelly, 2007). Knowing these implications, it is advisable to be open minded when meeting your team members.

Another important stage in group transformation to a team is problem solving attitude (Kinicki and Kreitner, 2006). A well performing team will try to solve them as soon as they arise and even if they fail they will learn a valuable lesson while doing this (El-Melig, 2012). The state of equilibrium, maintaining peace and not bringing the conflicts up reduces the intellectuality of each individual. Only communication and learning to express arguments clearly, not in an offensive way helps to grow for everyone and for the team all together. Problem solving attitude is closely related with trust issues discussed before. This proves that the process of becoming a team is complex and none of the steps should be omitted (Kinicki and Kreitner, 2006).

Kotze (2006) states that real teams can be created only when there is a constant and clear focus on performance. Focusing on performance enables teams to pass through all the developing stages faster and reach greater result.

Rothwell (2010) has distinguished three main differences between team and group. To start, team is more oriented to whole team, not someone individually. Secondly, teams are very diverse in terms of skills, competences and are aimed at complementing each other. Thirdly, teams are like one unit, they define themselves as a team and work as a team, all together. Thus, in order for group to become a team strong leader should emerge, all members must commit to one goal, feel responsible for it and be able to solve problems as soon as they arise.

The concept of a virtual group. As Lipnack and Stamps (2000) discuss, geographically dispersed teams, in other words virtual teams, are considered to be like traditional teams by definition with a few amendments. Group of people who interact through interdependent

tasks, overcome space, time, and organizational boundaries with links strengthened by webs of communication technologies, guided by common purpose (Lipnack and Stamps, 2000) – can be considered a virtual team.

Many of the factors that make traditional face–to–face groups work are essential to virtual group – work as well (Bergiel *et al.*, 2008). Bergiel et al. state that key success factors for successful virtual group – work are:

- _ Appropriate levels of technology;
- _ Clear communication;
- _ High levels of trust;
- _ Strong leadership.

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As the key feature of virtual group – work is overcoming barriers of space and time technologies play a significant role of mediating the process (Hunsaker, 2008). Unlike traditional face-to-face groups, virtual groups require extra technological setup, maintenance and additional training (Horwitz et al., 2006). Although nowadays technological connectivity is no longer a hurdle for virtual teaming, it requires extensive investment to establish internal communication and networks. As 'Virtual teams: leaders guide' by Hunsaker (2008) notes, there is a great variety of technological solutions to facilitate virtual group – work, though correct combination of technologies should be selected. As the authors discuss, choice of technologies used, such as phone/video conferences, email, shared data bases or intranets should be correspondent to the project virtual group is working on.

Other significant challenges for virtual – groups are related with communication. Working in international group setting and trying to communicate effectively relying only on technologies might be difficult due to different communication styles, various accents and different time zones (Bergiel et al., 2008). Therefore active management of communication process is required (Hunsaker, 2008). Set of rules and requirements in most cases should align the expectations of group members as well help to plan interrelated tasks on different time zones.

Behavioral challenges such as building rapport, establishing trust and managing conflict, may seem achievable in face-to-face group setting, however reliance only on virtual tools might create more complexity (Oertig and Buergi, 2006). Face-to-face communication is considered to be the key factor when developing trust among colleagues. Communication via technologies in virtual group setting creates work environment where non verbal cues are usually missed out, informal conversation is hard to establish and possibilities to build friendships are minimized. Fact that virtual groups in many instances are created from great variety of countries and different cultures indicates that shared history of working together on projects that could be perceived as a reference to trust built back then does not exist (Pangil and Chan, 2014). Therefore, unconventional group setting requires more thoughtful mediation of communication in order to overcome those hurdles.

Strong leadership is also stated as one of the key success factors leading virtual group – work to perform successfully. As 'Virtual teams: leader's guide' by Hunsaker (2008) indicates, there are two main leadership functions in unconventional group setting: managing performance and developing team. Managing performance is different task in virtual group, where performance evaluation is more complicated due to geographical dispersion and possible discrepancies in technologies used among group members (Horwitz et al., 2006). Leadership challenges related to team development such as motivation of group members and compensating lack of face–to–face communication also make developing strong leadership complex task (Hunsaker, 2008). In order to overcome those challenges managers having wide spectrum of qualities should lead virtual teams. Managers should be able to define goals and strategies of virtual group – work clearly, provide constructive feedback, see the bigger picture of the setting: combined of both group and individual interests, inspire and coach virtual group – work (Mukherjee et al., 2012). In other words managers should keep their focus on defining key concepts, facilitating processes and encouraging performance (Horwitz et al., 2006).

Approach to a virtual group as one unit is acceptable as it is supposed to be driven by common goals, however in order to try to minimize potential challenges a closer look should be taken to each member of the group. Working entirely in virtual space requires firm psychological foundation, and not all employees may be suitable for this kind of work (Bergiel et al., 2008). In addition to those possible challenges, cross-cultural environment brings potential issues of cultural clashes in management style, communication preferences and ability to rely only on verbal cues (Bergiel et al., 2008). As cross-cultural factor in virtual group – work plays such an important role it is to be discussed in specific details in further chapter.

Cross cultural virtual work: impact of socio - cultural context

Choice not to recognize cultural diversity and complexity is the key thing that limits successful management of intercultural group (Ochieng and Price, 2009). Framework created by Hofstede (The Hofstede Center, n.d) describing cultural dimensions: uncertainty avoidance, collectivism versus individualism, power distance, masculinity versus femininity and long term orientation, is a great help when trying to identify factors that have influence on organizational identification in cross-cultural group setting, therefore on the success of the project. As Mukherjee et al. (2012) note, dimensions expressing collectivism versus individualism and uncertainty avoidance have more specific insights to explain how culture, its differences and complexity, can contribute to organizational identification, consequently to overall performance of the virtual group.

Taking into account all possible cultural clashes international companies willing to implement cross-cultural virtual group work to enhance their flexibility and response to dynamic business environment should pay much attention and put great amount of effort to minimize the effect of potential challenges. In this way benefit of the advantages of virtual group – work could be maximized.

The concept of cooperation vs. collaboration. As mentioned above, sometimes in the literature words 'group' and 'team' are used interchangeably. The same situation is with 'collaboration' and 'co-operation'. Which one to use depends on the aim, goal and the structure of the project.

According to Arnold, Ducate and Kost (2012), co-operation is an activity within a group when members divide sub-tasks among themselves and until the end of the project they are responsible only for them. While McInnerney and Robert (2004) described collaboration as working in a group of people in order to achieve a common goal, with the respect of each members' contributions. However, it might be still unclear which one is best to use in which situations so further investigation is needed.

Different authors present different definitions of term co-operation. According to the Bank of Terms of the Republic of Lithuania (2010), co-operation is 'the combination of the work of several executors for the mutual work to be completed'. Presented definitions allow us to make a conclusion that co-operative work is more about completion of individual tasks and



then bringing it to the table for the final work of a group. In this kind of work individuals divide sub-tasks among themselves and perform them individually and only at the end different parts are combined together in order to have a final result (Rummel and Spada, 2005). According to Mazeikis (2007), working co-operatively increases competition as each member wants to show better result than the others, to be seen among others. However, co-operation is crucial for specific and short – term projects. The description of co-operation seems very similar to group description presented earlier as co-operation is most frequently used in group works (Vizgirdaite, 2011). People working in a group do not require interdependence, mutual task completion and they are more concerned about their own welfare so cooperation is perfect for a group work.

Collaboration in comparison with co-operation is more complex, involving and requires more interaction among group members (Kozar, 2010). In order to have effective collaboration there is a need of good interpersonal relationships (Vizgirdaite, 2011). Interaction among members increases mutual accountability, feeling of support, pleasant atmosphere and feedback generation (Thomas, 2002). All these named qualities will lead to an essential part of the collaboration – freewill participation, voluntary work and aiming at mutual benefits (Vizgirdaite, 2011). Another important feature of collaboration is good communication (Vizgirdaite, 2011). People can communicate verbally or non-verbally (Notes Desk, 2009). Only when members learn how to express themselves clearly, without making misunderstanding and not leaving something unsaid, good communication might be achieved. Interpersonal relationships and good communication allow members to have shared goals and mutual vision. When these are clearly defined members collaboratively solve occurring problems and go to the end all together (Kozar, 2010; Vizgirdaite, 2011; Thomas, 2002). From this description we can see that collaboration has a lot of similar qualities with previously presented team work: interdependence, mutual goals and aims, shared responsibilities and mutual accountability.

Thus, while collaborating members want to engage in a process, gain something from this action and they are interdepended. In co-operation final product is the most important and individuals are working towards it, not interested in knowledge they might gain from other members.

Transitioning from cooperation to collaboration

In the same way as group might become a team, co-operation might become collaboration as according to Vizgirdaite (2011) 'when a group starts collaborating they can become a team'. This means that when group is about to perform something they are at first co-operating and only if right actions are taken they are starting to collaborate.

There are several things that need to be considered if group wants to collaborate rather than co-operate. Cecez-Kecmanovic and Webb (2000) in their research stated that group cannot be forced to collaborate. This means that each member should feel the need for mutual work, they should like the project or task they are involved in and then the responsibility for the mutual final results of the project will emerge. Motivation for mutual benefits is one of the key factors playing in order to achieve successful collaboration rather than just co-operation (Duarte and Snyder, 2001). What is more, for collaboration it is crucial to support others and solve conflicts productively (Peters and Manz, 2007). Team members must be good listeners, have no doubts about others' commitment and know how to express constructive criticism as well as to accept it. Some studies suggests (Maznevski and Chudoba, 2000; Levesque et al., 2001) that for collaboration to emerge in a team there is a need of deeper relationships among members. Good interpersonal relationships might be developed among members who can trust and rely on each other.

In case mutual goals and interdependence does not emerge in a group they keep co-operating until the end of the task and try to fulfill the aims, tasks and objectives they or a supervisor have pre-defined for them.

Theoretical model of key processes for group development stages into a team: from cooperation to collaboration

After analyzing existing literature theoretical model of processes which are important in cross-cultural virtual group while co-operating and collaborating is going to be presented. Each project or task has specific requirements, aims and goals which combined with desirable outcomes of the task define if co-operation or collaboration should be used.

The first stage is group formation when members get to know each other, but do not go into deep conversations, maintain casual topics (Tuckman and Jensen, 1977). There are several techniques how groups can be formed and they might be homogeneous, heterogeneous or mixed (Christodoulopoulos and Papanikolaou, 2007). Homogeneous group members will have similar qualities, personalities and strengths. In heterogeneous groups members have diverse skills, capabilities and fields of expertise (Holtzman and Anderberg, 2011). Heterogeneous groups have a big advantage as they can divide tasks according to members' field of expertise and in this way they will not have weak points in their group. During this stage aims, goals, objectives and each members' expectations should be presented and overlooked (Tuckman and Jensen, 1977).

After the forming stage group members decide on the project they are going to work and divide tasks for each member. Now these tasks are their responsibility until the end of the project or until the pre-defined meeting and the focus only on this sub-task (Dillenbourg et al., 1996; Roschelle and Teasley, 1995). If by this time no visible leader emerges, someone (a manager, supervisor) from outside is needed to guide a group through this stage. This stage is also important for developing trust among members. When people feel safe in a group they tend to be more committed to the task (El-Meligi, 2012). If strong relationships does not appear among members the final division of tasks takes place, members of the group usually do not interact with each other, complete their tasks separately and bring to the table final results (Nelson, 2008).

Storming stage where structures and processes are established should also focus on pre-training of the members of cross-cultural virtual group. Pre-training session regarding technological demands, conflict management, performance together with those of different working styles and management of cross-cultural communication barriers is crucial to minimize the occurrence of potential challenges within the virtual group (Bergiel et al., 2008). To start with, it is essential that all members of the group would have clear understanding and knowledge about the technological solutions that are going to be used during the specific project group is formed to develop. Diversity of group members in cross-cultural virtual setting and lack of non-verbal cues potentially leads to difficulties in managing conflicts (Horwitz et al., 2006). Therefore this factor should be addressed in the pre-training session. Geographical and cultural dispersion of group members creates more relevance to pre-training step in group development process. Group members prior starting performing should have clear understanding that people they are going to work might have different cultural background, corporate structures and working styles. In the stage when structures and procedures are established it is important to introduce people that are going to work in unconventional group setting to bigger picture, different variables of the process and ways to cope with potential hurdles along the way (Bergiel et al., 2008).



The following stage can be named as a transition stage from co-operation to collaboration, however, not in all cases. If a group is only co-operating and after the task division show no interest in giving or receiving feedback to group members then transition is not going to happen. When a group learns and appreciates feedback, communication, follows pre-defined rules and respect others then group starts collaborating and becomes a team (Holtzman and Anderberg, 2011). Norming and performing stages are closely related as proper communication created in one stage will lead to great performance in another (Tuckman stages of group development, n.d). In addition to stages connectivity, all processes, tasks and people are interdependent as well (Holtzman and Anderberg, 2011). When the deadline for submission comes each member has to present to others their contribution to the work and the final report must be submitted. As it was mentioned before leaders' role in a group - work is very important (Rummel and Spada, 2005). Someone has to take responsibility and combine all separate parts to one piece. However, if such person does not emerge, the work is just a combination of individual works due to unique writing styles and manners. While in collaborative work all ideas interchange and it looks like written by one and the same person (Holtzman and Anderberg, 2011).

Table 2

Theoretical model of key processes in group development into a team stages: from cooperation to collaboration

Forming	Storming	Norming	Performing	Adjourning
Team GROUP creation. Clearly defined expectations. Goals / objectives defined and set.	Establishing structures and processes. Building trust. Introduction to different working styles due to: Culture; Technologies. Clear leaders' role.	Roles and relationships defined (Coping with differences; Appreciating and exploiting strengths of others). Decision making through negotiations and consensus.	Communication Interdependence of tasks Mutual support (Delegation of tasks) Constructive feedback is given and received.	Evaluation of final results.
<u>Cooperation</u>	<u>Cooperation</u>	<u>Cooperation</u> ——	<u>Collaboration</u>	
	Pre-training session: _ Conflict management/resolution; _ Communication in virtual environment; _ Communication cultural context (cross-cultural behaviors).			1

Adjourning stage will reach both group and team, however their members will act in different ways. Group members will be happy that the task is over and experience little or no emotions about the end. While team members will take some time to praise everyone contributions to the tasks, express gratitude and will leave with the feeling of satisfaction and desire to work again with those people (Tuckman stages of group development, n.d.).

Drawing on the above theoretical model research, the rationale for the methodology is provided with the goal to empirically assess the collaborative and co-operative processes in the case of a specific academic cross-cultural virtual project 'X-Culture'. **The context of research.** The project 'X-Culture' was launched in 2010 by Dr. Vas Taras, with the aim to gather professors, students, corporate employees and everyone who participates or is eager to participate in a global market place and work together on various projects: while collaborating in teams to provide solutions to real business world problems, develop a business plan or prepare a market entry plan. Until 2013 around 3000 masters and undergraduate students from 40 countries in all continents had participated in this project. Participants' field of studies mainly is International business and Business plan or solution to a real business problem.

'X-Culture' project is designed to serve as an educational tool enhancing collaborative work in cross-cultural teams where due to geographical dispersion communication is solely based on virtual communication means. The goal to achieve collaboration during the project in teams, which are created from participants representing great variety of countries and cultures, is demanding taking into account potential challenges within cross-cultural virtual group setting. In order to support the goal of 'X-Culture', project is divided into several parts:

- Before enrolment to the project each student must do their readiness test in order to evaluate their English skills and other abilities and understandings. Students also receive a detailed description of this project, what tasks they will have to fulfill, the deadlines they have to meet and another peculiarities of a project.
- Then participants are divided into groups and it is their responsibility to start collaborating with each other, find the best way of communication, and decide on the project they want to work and all other project related objects. Teams usually consist of 7 members from 7 different countries, however there are chances that two same nationality people will be in one team.
- _ This project lasts for two months and during this period their business plan should be prepared in a precise manner and submitted to the system. All proposals are evaluated by the professors from different universities and the best proposal and their team is awarded with a prize. Until the deadline there are several mid-deadlines all groups must meet and submit documents to the system.

Research problem. Clear structure of 'X-Culture' project from the very early stages of enrolment to the submission of the final report to the system should serve as a solid platform for collaboration within the participating groups. In order to ensure collaboration within cross-cultural groups trust among members should be developed, leadership and cultural barriers managed and proper technological means selected. Otherwise existing working environment will become an obstacle for the collaboration to emerge. The problem addressed in this research while analyzing 'X-Culture' project is whether the processes, structures and current platform of this project condition collaboration within participating groups, as well as when cooperation or collaboration should be taking place.

Research objectives:

- 1 To evaluate the processes within group
- development stages.
- 2 To determine the management of the influence of cross-cultural factor on the goal to achieve collaboration.
- $3\,$ To determine the management of the impact of virtual setting on the goal to achieve collaboration.

Research methodology

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Research sample. In order to gather data and represent the chosen population which is 2567 participants in 'X-Culture' project during the second track, researchers have decided to use statistical quantitative method. Quantitative method was chosen because of the ability to better represent the population as it is more difficult to do this while using qualitative method (Kura, 2012). What is more, quantitative method offers cause and effect relationships which is needed for making recommendations (Fassinger and Morrow, 2013). Also chosen population is very diverse (participants are from 40 countries) and quantitative research allow researchers to reach bigger sample (Kura, 2012). In order to provide claims of statistical significance probability sampling method of random sampling was chosen. Willing to represent diverse population of this project researchers chose random sampling giving each respondent equal possibility to be chosen. Link to the survey was uploaded in the projects' Facebook account which is available to all the participants from August until December. This session was chosen to draw sample due to the fact that it was the last completed session at the time research was started. In order to determine sample size needed the researches have used formula when the population size is known, which was 2567 participants.

Research instruments. To collect research data a questionnaire was designed for the participants of 'X-Culture' project who were a part of this project in August – December. It was important for the researchers to test whether designed theoretical model is applicable in real 'X-Culture' project environment. Received data is valuable for statistical analysis and for making recommendations for the project. Virtual version of the questionnaire is an effective way to gather objective information. Respondents are able to choose appropriate time for them to fill the questionnaire, they are anonymous and those questioned do not feel the pressure from the observer. Virtual version of questionnaire is available world-wide as well as cross-culturally (Fox, Murray and Warm, 2003).

The first question 'Have you participated in similar to 'X-Culture' (cross-cultural virtual) projects before?' was designed to filter respondents who were describing experiences in X-Culture project with potential comparisons to other similar projects that they participated in. Questions 'Do you feel that the concept of 'X-Culture' project (diverse cultures, virtual setting) had impact on your group work?' and 'In order to receive information throughout the project I approached (choosing from project coordinator, local coordinator, group members or other)' allowed researchers to identify the impact of the cultural diversity and virtual setting concepts of the project and to determine who the main sources of information were. 5-8 questions were designed according to theoretical model about group development stages: forming, storming, norming and performing. Each of those questions helped to receive insights of participants and to determine whether theory was applicable in practice; the 8th question consisted of various situations applicable to most of the group development stages therefore they were grouped in a separate question with the objective to reflect the overall experience. Respondents were asked to evaluate these statements which were designed to address the need of the pre-training session. Those who agreed to the need of the pre-training session where asked to specify the relevance of topics which according to theory are most commonly causing potential challenges within cross-cultural virtual groups. Questions about conflict resolution were a great help for researchers to analyze the emergence of conflicts and most common cause of them regarding nationality and nature. The guestion about the handbook helped to analyze whether the existing material is enough to prepare participants for the project and whether it is used at all. The following question asking respondents to choose between the definitions about cooperation and collaboration helped to generalize processes within the groups. The guestionnaire was finished with demographical questions concerning gender, age, occupation and nationality.

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The questionnaire was designed drawing on the theoretical model; therefore, series of statements drawn from the theory had to be measured. Likert scale was used in 5-9 questions in order to measure attitudes and opinions while allowing respondents to express how much they agree or disagree with the presented statement. This method accommodates neutral and undecided responses when participants do not have to take stand on particular topic with simple yes or no questions. Degrees of opinion can be measures creating an advantage for the researchers to collect quantitative data which suitable for statistical analysis. To avoid potential confusion, the standard scale of 5 was used.

The research was conducted in the period from April 1st to May 8th. The questionnaire was available through www.manoapklausa.lt and was sent to participants through emails and Facebook messages. During this period 93 responses were collected as it was calculated using presented sample size formula. There were no missing parts, no changes had to be made. In order to analyze and present data researchers used tools such as SPSS 20, descriptive statistics and Excel. Decision to use SPSS 20 statistical package for quantitative data analysis was made based on the fact that it allows simple and rather quick data preparation for further analysis (Greasley, 2008). It was also determined the best way to achieve usage of descriptive statistics which is designed to provide summary of information. Researchers used paired sample tests, correlation as well as calculated means in order to process collected data and conduct further analysis of happening processes.

Demographic analysis of the respondents. Results of the survey that was carried out distributed almost equally according to gender. Researchers received 47.31% of responses from male respondents, and the remaining 52.69% from female respondents.

Respondents were divided into 4 sections according to occupation. The majority of the respondents were working students by occupation, covering 55.91% of all responses. The second largest group by occupation was students, representing 40.86% of all responses. Groups of respondents representing employed or unemployed cover relatively small parts of all responses: employed 2.15% and unemployed 1.08%.

The great majority of the respondents are from 22 years old to 25, covering more than 84% of overall answers. The first age group 18-21 years represents 9% of gathered answers, followed by 5% of 26-29 year old participants and the smallest part of respondents (2%) were 30 years old and older.

As one of the main factors of this research is cultural diversity, collected answers represents great variety of different cultures and nationalities, such as Albanian, American, Canadian, Cypriot, French, German, Ghana, Hispanic, Hungarian, Indian, Italian, Korean, Lithuanian, New Zealand, Omani, Pakistani, Polish, Serbian, Spanish, Swiss, Turkish and Ukrainian. The highest number of responses was received from Lithuanians (29 out of 93), followed by 9 French respondents and 8 American respondents.

Analysis of previous experience in similar to 'X-Culture' projects. The first question asked the respondents of the research to answer if they had a chance to participate in similar to 'X-Culture' projects before. Out of all 93 of those who answered 45 respondents stated that they have been participating in similar to 'X-Culture' projects regarding diverse cultural and virtual setting. The remaining 48 respondents stated that 'X-Culture' was their first encounter with virtual cross-cultural project. Respondents were also asked to share whether they felt that different cultures and virtual setting had impact on their group work. The goal at this point was to find out if previous experience in similar projects had influence on encountered

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group work during 'X-Culture' project. Analyzing answers from respondents with previous experience in similar projects it is seen that vast majority of respondents experienced positive impact, small portion stated to have negative impact and remaining 13 of the respondents stated that no impact was felt due to cultural diversity and virtual setting. Answers from respondents who did not have previous experience in similar projects distributed according to similar tendencies. 19 respondents shared that impact from diverse cultures and virtual setting was positive, 13 of them stated that negative impact was experienced and 16 respondents felt no impact.

Disregarding the fact whether respondents have participated in similar cross-cultural virtual projects before, all of them were asked to indicate about individuals they have addressed during the project to receive information. Collected data show that majority of the respondents 43.01% approached their group members to find out the information that they needed. Two other groups approaching local coordinator and project coordinator (Dr. Vas Taras) consists of similar amount of responses, 27.96% and 26.88% respectively. Only 2.15% of respondents chose option of other, indicating that information was searched in the Internet.

Analysis of group development stages. To better evaluate processes happening in different stages of the project, statements noting key aspects within each stage were asked to be evaluated from strongly disagree to strongly agree (overall five options). Calculated means for each evaluated option were selected to draw trends of processes throughout the project 'X-Culture'.

Forming. Forming stage plays an important role as a foundation for future work.Calculated means of each statement regarding formation of the group, establishing contact and starting discussions show that respondents are more likely to agree with the provided statements (\geq 3). Looking at the distributed data it is clear that female respondents expressed higher agreement to all of the provided statements. Meanwhile calculated means for male respondents were a bit lower indicating more potential issues regarding formation of the group.

Storming. As in previous, forming stage, calculated means illustrate that respondents were more likely to agree with the statements describing processes happening in storming stage. Exchange of interpersonal information either evaluation of academic knowledge of group members or building trust in them was evaluated lower than the average of 3.5 by both male and female respondents, meaning that respondents did not perceive these processes of high occurrence. The highest mean in storming stage was calculated for statement 'I felt comfortable expressing my opinion' by both male (3.93) and female (4.16) respondents. Regarding the leadership emergence in storming stage female respondents agreed more to this statement, reflecting in the calculated mean of 3.8, than compared to male respondents whose average was 3.25. Statement regarding discussions and assignments of responsibilities and tasks also had relatively high calculated mean in groups of both genders. As it is seen from collected answers, respondents feel most comfortable expressing their opinion and starting discussions with their group members regarding responsibilities and tasks.

Norming. Respondents expressed least agreement with the statement 'Each member fulfilled their roles'. Mean for male respondents for this statement is 3.14, when female respondents expressed disagreement with this statement even more with the mean of responses being only 2.8. The most agreements were obtained for statement 'The most appropriate communication tools for our group were found' in this stage. Both respondents groups on average evaluated this statement with higher than 3.5 calculated averages. Statements 'Each member had a specific role' and 'Negotiations and reaching consensus were present'

have calculated means being equal or higher than 3.5. Meanwhile, statement regarding constructive feedback on average was evaluated lower than 3.5. When summarizing, collected data illustrates that processes of high importance at norming stage: distribution of roles and responsibilities, norming of communication tools and negotiations when reaching consensus were present in the groups of 'X-Culture' as theory suggests. However, the fulfillment of tasks should be addressed as higher focus area.

Performing. Performing stage of group development is crucial as it reflexes previously made decisions and has direct impact on final result. When analyzing data for this stage it is noticeable that 'I was comfortable to ask for help from other members' received same evaluation from both male and female respondents. On average it was evaluated 3.73, not stating strong agreement however indicating that people felt comfortable to ask for help if needed. Other statements designed to reflect processes happening in performing stage on average were evaluated higher by male participants than compared to female. Statements regarding provided support, the satisfaction with final result and work done by group or only by several individuals on average were evaluated lower than 3.5, meaning that most of the respondents have not managed to prepare the final report as a group that all of the group members would be satisfied with. The lowest average was calculated for 'Each member showed interest to contribute their help to the tasks of other members, tried to align ideas according all group (interdependence of tasks was present)' statement (male 3.14, female 2.88). This statement was designed to evaluate willingness of group members to collaborate and reach final result as a team. Low average evaluation of this statement indicates that groups have struggled to achieve it. However, it was not caused by cultural diversity, which was on average evaluated higher than 3.5 in both gender groups.

Taking into account all the data regarding each stage of group development in the 'X-Culture' project, it is clear that none of the statements were evaluated with strong disagreement or strong agreement. Meaning that although processes may not be of high occurrence in majority opinion, they are addressed in each stage of the project, making theory applicable to the real life project.

Analysis of overall experience in 'X-Culture' project. To evaluate better overall experience and factors of high importance, respondents were asked to evaluate statements regarding general insights about 'X-Culture' project and its concept.

As 'X-Culture' is designed to initiate group-work in virtual setting, it was really important for researchers to evaluate how respondents felt in virtual environment. Statements 'I felt comfortable without face-to-face communication' and 'I felt comfortable relying only on technology' on average were evaluated higher than 3.5 by both male and female respondents. This indicates that although it is not the strong agreement that virtual setting of the group-work was the most appealing, this data state that it was acceptable and reasonable environment for group members to work together. One of the biggest challenges was indicated different time zones while different languages and great amount of deadlines throughout the project were not perceived as negative impact for the overall performance. However, cultural variety still had some impact for all respondents regarding tasks division, time management and compliance with requirements.

Analysis of main factors influencing virtual group work. As 'X-Culture' is cross-cultural virtual project, researchers found it important to analyze and interpret data, linkages and factors concerning virtual environment. Researchers have highlighted the main factors contributing to virtual group work according the theory. Carried out Paired Samples statistics

are considered to be the most applicable tool for data analysis in this case. It was decided to choose evaluation of statement 'I felt comfortable relying only on technology' as the base to compare and find linkage to other statements.

After Paired Samples statistics were conducted for designed set of statements, results showed:

- Correlation between statements 'I felt comfortable relying only on technology' and 'Different time zones were not a problem' as well as 'I felt comfortable relying only on technology' and 'Exchange of interpersonal information allowed me to build trust in my group members' was calculated to be lower than 0.3, meaning extremely weak positive linear relationship between them.
- Correlation between statements 'I felt comfortable relying only on technology' and 'The most appropriate communication tools for our group were found'; 'I felt comfortable relying only on technology' and 'Different languages were not an issue' as well as 'I felt comfortable relying only on technology' and 'Clear leader/leaders emerged' was calculated to be higher than 0.4, resulting in rather weak positive linear relationship.
- _ Correlation between statements 'I felt comfortable relying only on technology' and 'I felt comfortable without face-to-face communication' was calculated to be higher than 0.7, meaning that strong positive linear relationship exists between those variables.

Having calculated correlations for these statement pairs, conclusion can be made that pairs having lower than 0.4 correlations, i.e. weak linear relationships, are not perceived to have influence on how comfortable participants of 'X-Culture' feel relying only on technology. Set of statements having correlation higher than 0.7, indicates that being comfortable without face-to-face communication has influence on how comfortable participants have felt relying only on technology throughout the project as the relationship between those two statements is strong.

Analysis of main factors influencing achieving collaboration in 'X-Culture' project. The main objective for participating groups' in 'X-Culture' project is to achieve collaboration. Due to this reason the researchers identified the statement 'Each member showed interest to contribute their help to the tasks of other members, tried to align ideas according all group (interdependence of tasks was present)' as the best describing collaboration. If the respondents agreed or strongly agreed to this statement this indicated that collaboration was present in the group. The other statements chosen to test whether there is correlation were picked up by their relevance according to the theory. The strongest correlation was found with the statement 'Each member fulfilled their roles' which was 0.751 and significance in paired samples test show 0.635 indicating that there is no statistically significant difference between two statements. This corresponds to the theory that in order to reach collaboration in a group all members must be committed to one goal and have same purpose. The lowest correlation was noticed with the statement 'Cultural diversity was not an issue' which was 0.291 and significance was 0.000 indicating that there is a difference between these two statements. This shows that cultural factor had an impact and created some obstacles for the participants to reach collaboration as it was also emphasized in theory.

Relationship between co-operation/collaboration and interdependence of tasks. One of the goals of researchers was to find out whether level of interdependence of tasks, asked to be evaluated as a part of performing stage, had similar trends when respondents were asked to choose from two definitions describing work within their groups (one being definition of co-operation and the other definition of collaboration). Therefore researchers have decided to

use cross tabulation for the collected answers of those two questions.

From the data presented it is clear that respondents who have marked that interdependence was not present in their groups also chose definition of co-operation, the same with the respondents who stated that interdependence of task had high presence in their group work and chose definition of collaboration. Those of the respondents who were choosing from the options among disagree, neither agree nor disagree and agree also indicated type of work if it was co-operation or collaboration according to the same trend. Although those two questions have interdependence between themselves, 6.8% of the respondents stated that despite the fact that interdependence was not present in their groups they would describe work in their groups as collaboration. 2% of the respondents who indicated that interdependence of tasks was present in their groups, chose co-operation as the description of work done in their groups. This highlights interdependence of tasks being an essential part of achieving collaboration.

Relationship between group members' participation, contribution and delivery of final result. Academic group projects as well as group projects in general have cases when all group members have to deliver final result, however in reality it might be done only by one or several members. When analyzing 'X-Culture' project, the researchers wanted to find out how actually final result is achieved and who is contributing to it.

To obtain data that would allow analyzing this aspect, researcher used statement 'Our work was done by US (all group) not by ME or just by several group members' and a question 'The final result in the group was created by (choosing from: one or several individuals and entire group)'. Cross tabulation was used to analyze those answers. From the data presented below it is clear that theory is applicable in practice as those who agreed or strongly agreed with the statement have indicated that the work was completed by entire group and vice versa.

Taking into account the same question regarding who contributed to delivering final result, researchers wanted to analyze whether this particular question had impact on respondents perception delivering final project on their own. The results showed that 68.6% of respondents who stated that final result was achieved by one or several individuals would have been able to complete the project by themselves, however 31.4% who also have chosen that final work was done by one or several individuals, stated that they would not be able to complete the project completely on their own. Of those who stated that final work was done by entire group, great majority 73.8% indicated that they would not be able to finish the project on their own, meanwhile remaining 26.2% indicated that they would be able to achieve it without contribution from entire group.

Concluding, it is clear that when the work is done by one or several individuals participants are more confident about their ability to complete the project by themselves. On contrary, those who managed to do the project with the entire group state that it would be difficult to complete the project on their own.

Analysis of importance of pre-training session, conflicts, their causes and resolution. A vast majority of the respondents – 63,44 %, feel that the pre-training session about virtual setting, cross-cultural behavior, potential challenges is an important part of the 'X-Culture' project. Later on these respondents were asked to choose the topic which in their opinion should be the main focus of this session. More than half – 50.85% of those surveyed believe that communication in virtual environment should be more emphasized during these sessions. 33.90% of the respondents think that cross-cultural behaviors topic should also be taken into consideration while making pre-training sessions. The smallest part of respondents (15,25%) have chosen conflict management topic. The later one can be explained as only small part of participants (31,18%) experienced some conflicts with their team members and for most participants (62,07%) they were resolved effectively. Speaking about the conflicts two main causes were noticed - Task fulfillment (34,48%) and Personality (31,03%), some conflicts were caused by educational background (20,69%) and culture (13,79%).

In order to solve those conflicts some group members came into help (66,67%). The group leader, all group members and instructor received equal amount of responses - 11,11% and the last answer 'By the organizer of the project' was not picked by any of the respondents.

The main reasons why conflicts are not resolved in 'X-Culture' project. When asked to indicate if conflicts were faced during the project, those who answered that conflicts have occurred, also been asked to indicated what do they see as the main reasons holding groups back from resolving conflicts. The most frequently shared insight was lack of motivation towards the participation in the project. It had a great impact on how responsibly and seriously participants perceived their responsibilities as well as assigned tasks, in this case the lower the motivation of the participant is, the lower quality of the delivered task is and consequently the harder resolution of conflicts is achieved. Respondents also indicated differences in culture, communication manner and in some cases quite severe discrepancies in educational background that made management of conflicts complicated. Single answers regarding personality differences, lack of face-to-face communication and small opportunities to exclude members from the group were also shared as insights stopping conflicts to be resolved.

Respondents who stated that during the project conflicts occurred were also asked to indicate which of the cultures within their groups were the most difficult to work with. Collected data shows that the most frequently indicated nationality to work with was Chinese (6 responses), second place was taken by Indian participants (5 responses) and the third place by Spanish (4 responses). Other indicated countries were Korean, American and German.

Facing challenges in cross-cultural virtual projects is almost inevitable, therefore in order to simplify processes of dealing with potential challenges organizers of the project have developed handbook material for those participating in the project. Researchers were willing to find out whether provided material 'How it works' and other documents were useful for respondents. Gathered data clearly illustrates that greater part of all respondents 63.44% expressed positive opinion towards usage of handbook material. 38.71% of the respondents indicated that they have looked to the handbook material, meanwhile 24.73% of the respondents stated that this material have helped them a lot throughout the project. 25.81% of those who answered expressed an opinion that handbook material was not helpful and remaining 10.75% of respondents stated that they did not even know about this material.

Concluding, it is noticeable that a positive attitude expressed regarding the usage of handbook material by more than a half of respondents makes it an important part of 'X-Culture' project.

Discussion and conclusions

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The key goal and motivation of this research was to determine whether processes and structures leading virtual groups towards collaboration studied in theory are applicable in a real life academic virtual cross-cultural project 'X-Culture'. To achieve it researchers proposed theoretical model, developed to reflect the main factors within different group development stages. The next step was designing a questionnaire where real participants of the project were asked to share their insights for grouped sets of statements. Analysis of collected data allowed researchers to evaluate theoretical implications, draw conclusions on factors and processes that are both applicable in real case of the project and mismatched with those proposed in theoretical model.

As analysis showed, the main findings were indicating that majority of processes are present in group work of 'X-Culture' participants. In more details, evaluation of forming stage, which has the main focus in theory of group creation, establishing contact with group members, defining expectations, objectives and goals (Tuckman and Jensen, 1977), led to the point where researchers could say that although processes within this stage are not of very strong presence they are occurring. Participants that were the part of research survey on average shared that the key processes of forming stage are applicable in real life project.

Storming stage has the key areas of exchange of interpersonal information that is perceived as foundation for trust building, forming an opinion about the group and identifying differences and similarities task (Dillenbourg et al., 1996; Roschelle and Teasley, 1995; Nelson, 2008). Analysis for this group development stage also illustrates that all the processes marked as key in theory are present in group work in 'X-Culture'. Average evaluation might not be extremely strong but it is a significant indicator that people pooled in the groups managed to go through storming stage following theoretical processes.

Norming stage is regarded as the stage where processes and structures are clearly drawn and agreed upon: roles, responsibilities and communication tools are chosen (Holtzman and Anderberg, 2011). Evaluation of these key areas by respondents illustrate this stage as the stage where processes of putting everything into norms are working. However low average evaluation of fulfillment of those assigned tasks indicates that setting norms is not enough, higher involvement and motivation is needed.

As to performing stage, the main focus is on how well actually group can work with different influential factors such as cultural diversity, how does is manage to provide support, show interest not only in their own work and deliver final result as a product developed by a unit (Rummel and Spada, 2005; Holtzman and Anderberg, 2011). Gathered data for these aspects described as key for this group development stage in theory, let researchers see that they are present in 'X-Culture' project groups. As throughout the previous stages of group development, average evaluation by respondents is not extremely high, however it is an indicator that theoretical aspects discussed in proposed model are applicable and present in the real example of 'X-Culture' project.

Analysis of 'X-Culture' project stage by stage led to conclusions that transition from co-operation to collaboration, by theory suggested to happen between norming and performing stages, is achieved only by some groups (Holtzman and Anderberg, 2011). This can be explained by the facts that those groups managed to follow all the steps in development stages, overcome challenges and establish commitment to final and common result (El-Meligi, 2012). Therefore, following and completing the processes in previous stages is essential for smooth transition to collaboration. Theory states that this transition is simplified by pre-trainings and this is reflected in reality, as the carried out research showed (Bergiel et al., 2008).

Looking in the bigger picture of proposed model applicability in real case of 'X-Culture' project, it is clear that theoretical implications are present. However, there is still room for improvement in order to support and encourage the transition to collaboration for bigger part of participants of the project.



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Šarūnė Janutaitė, Viktorija Vosyliūtė, Jurgita Vizgirdaitė. Tarpkultūrinis virtualus grupinis darbas: kooperacija ir bendradarbiavimas (akademinio projekto "X-Culture" atvejo analizė)

Verslas, studijos ir įvairios užduotys yra vis dažniau atliekamos tarptautinėje aplinkoje ir dėl šios priežasties virtualios tarpkultūrinės grupės tampa vis populiaresnės (Holton, 2001). Mokslinėje literatūroje analizuota, kokios salvgos yra būtinos efektyviam grupės darbui bei virtualių grupių ypatumai (Webster ir Staples, 2006, Anawati ir Craig, 2006). Vizgirdaitė (2011) taip pat nagrinėjo sąvoką bendradarbiavimas iš įvairių perspektyvų, Zdanytė ir O'Connor (2012) tyrė virtualių projektų jtaką studentų kūrybiškumui ir bendradarbiavimo įgūdžiams, tyrimai taip pat buvo atlikti siekiant išsiaiškinti pasitikėjimo, motyvacijos ir asmeninio bendravimo poveikį galutiniam grupės rezultatui. Atlikus antrinį tyrimą, paaiškėjo, kad viena sritis liko neištirta - kooperacija ar bendradarbiavimas turėtų būti naudojamas grupei dirbant tarpkultūrinėje virtualioje aplinkoje.

Straipsnio tikslas - nustatyti, kada kooperacija ir bendradarbiavimas turėtų būti naudojami tarpkultūrininiame virtualiame komandiniame darbe.

Norint tinkamai suprasti ir nagrinėti kooperavimo ir bendradarbiavimo skirtumus, būtina apibrėžti grupės ir komandos savokas. Teigiama (Koey, 2007), kad grupė yra individualistiškos prigimties sąvoka, kuri turėtų pereiti per tokias pakopas kaip formavimas, idėjų ir normų išgryninimas, užduočių atlikimas ir grupės išsiskirstymas. Svarbu paminėti, kad skirtingi asmeniniai grupės narių tikslai bei motyvacija dažnai procesą sėkmingai pereiti visas grupės formavimosi ir darbo kartu pakopas paverčia sunkia, neretais atvejais neįgyvendinama užduotimi (Petress, 2004). Terminas "komanda" turi daugybę apibrėžimų, tačiau dauguma autorių, norėdami apibrėžti komandos savoka, vartoja raktinius žodžius: bendradarbiavimas, tarpusavio priklausomybė, bendri tikslai ir motyvacija, kurie padeda įgyvendinti paskirtas užduotis.

Komandos ir grupės sąvokų skirtumai rodo, kad kiekviena komanda iš pradžių turėtų būti grupė. Norint užtikrinti grupės virsmą komanda svarbu atkreipti dėmesį į vadovo rolę, atsakomybę bei norą spręsti problemas. Kinicki ir Kreitner (2006), Kotze (2006) ir El-Meligi (2012) teigia, kad lyderystė yra vienas svarbiausių veiksnių sėkmingam komandos darbui, lyderis, matydamas didžiausius

komandos narių talentus, turėtų gebėti atitinkamai skirstyti užduotis, taip kurdamas tarpusavio priklausomybę, inicijuodamas klausimus ir nuomonės reiškimą tarp komandos narių. Mokslininkai (El-Meligi, 2012; Kelly, 2007) taip pat pabrėžia, kad atsakomybių pasiskirtymas turi įtakos grupės virsmui komanda. Komandos tikslas - turėti asmenines atsakomybes, bet kartu jaustis atsakingiems už komandos pasirodymą bei atliktas užduotis. Lyderystė ir bendra atsakomybė yra neatsiejamos nuo greito reagavimo sprendžiant problemas. Iniciatyvos kuo greičiau spręsti iškilusias problemas, komandą formuoja ir stiprina tik tada, kai komandoje vyrauja aiški komunikacija, nuomonių raiška bei argumentų dėstymas (Kinicki ir Kreitner, 2006). Šie veiksniai parodo, kad grupės virsmas komanda yra sudėtingas procesas, kurį norint užtikrinti negalima praleisti nei vieno žingsnelio.

Atkreipiant dėmesį į virtualų darbo kontekstą, aptariamą šiame straipsnyje, svarbu išsiaiškinti ir virtualių grupių sąvoką. Virtualios grupės yra laikomos panašiomis į paprastas grupes, tačiau pirmosios turi įveikti atstumo, laiko ar organizacinių skirtumų sukeltas problemas (Lipnack ir Stamps, 2000). Dauguma veiksnių, pavyzdžiui, atitinkamas technologijų lygis, sklandi komunikacija, aukštas tarpusavio pasitikėjimas ir sklandi lyderystė yra vienodai svarbūs tiek įprastoms grupėms, tiek virtualioms, tačiau pastarosios turi labiau pasistengti siekiant įveikti šias problemas (Hunsaker, 2008, Horwitz, et al., 2006, Bergiel et al., 2008, Oertig ir Buergi, 2006, Pangil ir Chan, 2014). Bergiel et al. (2008) pabrėžia, kad siekiant sėkmingai dirbti naudojantis virtualia aplinka, reikia gero psichologinio pasirengimo ir ypatingo dėmesio skyrimo kiekvienam nariui, kadangi ne kiekvienas yra pajėgus dirbti tokioje aplinkoje. Tačiau net ir atsižvelgiant į visus kultūrinius ir kitus skirtumus kompanijos yra pasiryžusios naudoti tarpkultūrines virtualias darbo grupes, kurios padeda jiems išlikti lankstiems bei greitai reaguoti j vis besikeičiančią verslo aplinką (Ochieng ir Price, 2009).

Kaip jau buvo minėta pradžioje, kartais terminai kooperacija ir bendradarbiavimas yra vartojami kaip sinonimai, tačiau iš tikrųjų jie tokie nėra. Terminų žodyne (www.zodynas.lt) teigiama, kad kooperacija tai "tam tikra darbo organizavimo forma, kai daugelis žmonių ar jų kolektyvų dalyvauja tame pačiame arba artimuose darbo procesuose". Sąvoka parodo, kad kooperacija siekia individualių užduočių atlikimo, užduočių pasiskirstymo ir galutinio darbo parengimo iš atskirų dalyvių paruoštų dalių (Rummel, Spada, 2005). Procesai taikytini kooperacijoje sutampa su tais, kurie vyksta grupės darbe (Vizgirdaitė, 2011).

Tuo tarpu bendradarbiavimas yra sudėtingesnis procesas, kuris reikalauja visų narių dalyvavimo ir bendro darbo (Kozar, 2010, Vizgirdaitė, 2011). Siekiant pasiekti geriausių rezultatų bendradarbiaujant visi dalyviai turi jausti bendrą atsakomybę už galutinį rezultatą, aplinkinių paramą, jaukią aplinką bei gerus tarpusavio santykius (Vizgirdaitė, 2011, Thomas, 2002). Bendradarbiavimo savybės yra būdingos efektyviam komandos darbui, kurio metu dalyviai bendrai sprendžia iškilusias problemas ir juda tikslo link kartu (Kozar, 2010, Vizgirdaitė, 2011, Thomas, 2002).

Anot Vizgirdaitės (2011), grupė tampa komanda, kai jos nariai tarpusavyje pradeda bendradarbiauti. Taigi kiekviena komanda iš pradžių yra grupė ir tik įgyvendinus tam tikrus procesus grupė gali tapti komanda.

Straipsnyje pateikiamas teorinis modelis, kuris sujungia procesus: grupės virsmą komanda ir kooperavimosi perėjimą į bendradarbiavimą. Teorinis modelis pagrįstas penkiomis grupės transformavimosi pakopomis: formavimas, idėjų ir normų išgryninimas, užduočių atlikimas ir grupės išsiskirstymas (Tuckman stages of group development, n.d.), modelyje išskiriami pagrindiniai uždaviniai, tik sėkmingas ir nuoseklus šių uždavinių įgyvendinimas leidžia žingsnis po žingsnio grupei virsti komanda bei pasiekti bendradarbiavimą. Užtikrinti uždavinių įgyvendinimą, prieš kooperavimosi virsmą bendradarbiavimu tarpkultūrinėje virtualioje aplinkoje, svarbu turėti mokymus apie tarpkultūrinį bendravimą, technologinius darbo aspektus virtualioje komandoje ir konfliktų valdymą. Sudarytas teorinis modelis pabrėžia, kad mokymai apie sritis, kurios išskiriamos, kaip pagrindiniai iššūkiai tapkultūrinės komandos darbui virtualioje aplinkoje, turėtų užkirsti kelią trukdžiams sėkmingam bendradarbiavimui pasiekti.

Siekiant patikrinti teorijos ir sugeneruoto teorinio modelio pritaikymą praktikoje, tarpkultūrinis virtualus "X-Culture" projektas buvo pasirinktas kaip tyrimo objektas. "X-Culture" projektas, įkurtas Dr. Vas Taras ir startavęs 2010 metais, buvo analizuojamas siekiant atsakyti į klausimą: ar



esamos projekto sąlygos, skirtingų šalių ir kultūrų dalyviai bei virtuali darbo aplinka leidžia vykti bendradarbiavimui, taip pat įvertinti, ar norint įgyvendinti projekto užduotį užtenka kooperavimosi, ar visgi grupės turi virsti komandomis ir pasiekti bendradarbiavimą.

Vykdyta projekto dalyvių internetinė apklausa.

Išanalizavus projekto "X-Culture" dalyvių atsakymus, paaiškėjo, kad pagrindiniai procesai, vedantys link bendradarbiavimo tarpkultūrinėse virtualiose grupėse, vyksta ir yra skatinami "X-Culture" projekto metu.

Pavyzdžiui, pirmoje grupės formavimo stadijoje, pasak tyrėjų, turėtų vykti grupės narių susipažinimas, lūkesčių, tikslų ir uždavinių nustatymas (Tuckman and Jensen, 1997). Šiuos procesus galima išvysti ir tarp "X-Culture" projektų dalyvių, tačiau jie nėra pakankamai ryškūs, kad tai būtų galima pasakyti apie visas projekte dalyvavusias grupes. Grupės raidos etapų įvertinimas padėjo suformuoti išvadą apie teorijos pritaikymą praktikoje.

Išnagrinėta teorinė medžiaga leido daryti prielaidą, kad kooperacija gali virsti bendradarbiavimu tarp normų išgryninimo ir veikimo stadijų (Holtzman and Anderberg, 2011). Projekto "X-Culture" atveju sėkmingai šis perėjimas buvo įvykdytas tik nedaugelio. Dėl šios priežasties yra svarbu daugiau dėmesio skirti pirmoms grupės formavimo pakopoms ir su šių procesų svarba supažindinti visus dalyvius.

Apibendrinant galima teigti, kad projekte "X-Culture" aptinkami visi mokslinėje literatūroje bei modelyje pagrįsti procesai, tačiau kai kurie procesai reikalauja daugiau dėmesio ir moderacijos iš išorės.

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