



DE GRUYTER
OPEN

Journal of Intercultural Management

Vol. 8 | No. 3 | September 2016 | pp. 69–85

DOI 10.1515/joim-2016-0017

Beata Krawczyk-Bryłka

Politechnika Gdańska

bkrawczy@zie.pg.gda.pl

Intercultural Challenges in Virtual Teams

Abstract: Virtual teams are usually geographically dispersed and consist of members from different countries and cultures. They influence internal communication processes and can cause personal conflicts, misunderstandings or lack of trust. Intercultural diversity is also significant for goal setting and team effectiveness. The aim of this article is to check if virtual team members appreciate the cultural diversity or rather suffer from lack of team cohesion and mutual understanding. The article presents research conducted among specialists from the IT sector who have experience in working in virtual teams. They perceive intercultural collaboration in virtual teams as the opportunity to exploit the potential of specialists from all over the world but they also point to some challenges related to cross-cultural virtual teamwork.

Key words: teamwork, virtual team, global virtual team, intercultural diversity, team trust

Introduction

The contemporary market is global, so the cross-cultural trade and labour relations become more and more popular. Virtual cooperation allows for

faster formation of international relations and replaces face-to-face collaboration in many companies and projects. Cultural diversity is said to be one of the basic features of virtual teams, in addition to multilingualism and working in different time zones (Guzman, Ramos, Seco and Esteban, 2010, p. 410). Culturally diverse virtual teams, often called global virtual teams, are teams whose members are dispersed geographically – they stay in different locations, countries or continents, interacting by using different technologies and usually not even seeing one another (Mukherjee and Hanon, 2012, p. 529; Han and Beyerlein, 2014, p. 7).

Cultural diversity is said to be a great source of capital for organizations and teams, as the different cultural backgrounds result in differences in world perception capabilities and networks that make the teams more innovative (Chua, Morris and Mor, 2012, p. 116). Due to different educational systems the team members from different countries deliver diverse knowledge (Michalak, 2012, p. 313). Cross-cultural competences mixed with ICT efficiency are also pointed to as crucial for effective functioning in the global market (Sobieraj, 2012, p. 163). At the same time, cultural diversity can cause many problems like conflicts, isolation, discrimination or stress (Mironski, 2010). According to the similarity attraction theory, team members prefer and feel comfortable to collaborate with similar people, whereas diverse environment makes teams less integrated, less communicated and more prone to relationship conflicts (Wickramasinghe and Nandula, 2015, p. 142). Another serious challenge are language barriers that influence team communication on many levels. The cognition level means the language differences correlate with attributions the team members use to access their peers (they are often stereotypic in nature). On the emotional level language barriers intensify isolation and frustration (Tenzer, Pudielko and Harzing, 2014, p. 511). They are also important for team communication efficiency and influence the team trust. Trust reduces the cultural distance, increases team members' motivation and stimulates open information sharing that leads to conflict resolutions and good performance (Child, 2001, p. 278).

In this context intercultural virtual teams can be perceived as a great chance to achieve the team and organization goals but there are also important challenges that need to be taken into consideration while constructing such teams. There are many articles concerning global virtual team characteristics but nevertheless they are still poorly explored in research, especially in Polish literature. The aim of this article is to check if virtual team members appreciate the cultural diversity or rather suffer from lack of team cohesion and mutual understanding. It was achieved with the means of research conducted on a group of IT specialists from the IT sector who have experience in working in virtual teams. The qualitative research was used to analyse their perception and feelings about intercultural virtual team collaboration and to identify the main challenges. They are presented in the context of previous research concerning global virtual teams.

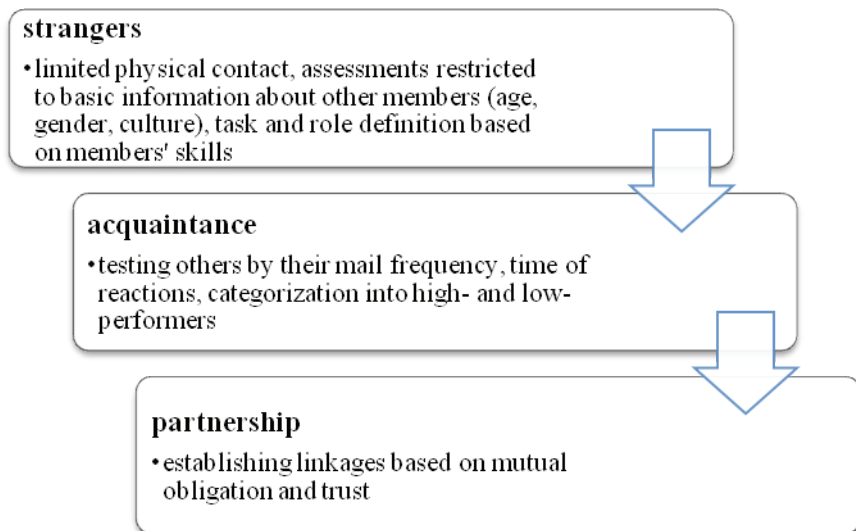
Characteristics of culturally diverse virtual teams

A global virtual team is defined as 'a group of people who work interdependently with a shared purpose across space, time and organization boundaries using technology' (Magnuson, Schuster and Taras, 2014, p. 288). The differences between a traditional and a virtual team are defined interestingly by Skyrme (Michalak, 2012, p. 311), who mentions cyberspace, cybertime, cyberstructure and cyberknowledge as the attributes of virtual team. Cyberspace means they are free from place, legislation and resource dependence, cybertime is nonlinear and lets the team use all 24 hours of a day, cyberstructure refers to virtual connections between team members and cyberknowledge indicates the ability to possess and transform information with IT and ICT tools used by virtual teams. Eom (2009, p. 13) and Militaru et al. (2014, p. 19) complete this description with the 'no common past and future' aspect, as virtual global teams are often constructed to deal with specific tasks or projects.

These attributes intensify the challenges characteristic for traditional intercultural teams. There are at least a few aspects of global virtual collab-

oration that influence team processes and effectiveness: lack of non-verbal communication, physical isolation, cultural differences based on cultural dimensions and necessity to use English as a foreign language (Hung, Nguyen, 2008, p. 2). All of them influence members' perception, communication and team identification (e.g. task priorities) — the last two aspects are also connected with occurrence of subgroups. Computer mediated communication in global virtual teams is also connected with delayed feedback, misunderstanding and reduction of social integration, but on-line collaboration can also be more creative and satisfactory (Magnuson, Schuster and Taras, 2014, p. 288). To be successful, global virtual teams need to develop and reach the most mature level of the model of global virtual team evolution (Eom, 2009, p. 13), which is presented in Figure 1.

Figure 1. The model of relationship evolution in a global virtual team



Source: own work based on Eom (2009, p. 13).

The 'Partnership' phase assumes interdependent collaboration, shared team mental model and trust. Clear task definition, engaging in task imple-

mentation, building respect and trust, as well as management of team boundaries are said to be the crucial factors of global virtual team performance (Morgan, Paucar-Caceres and Wright, 2014, p. 610). They are not easy to reach because of ambiguities and uncertainty related to task demands and peers that occur at the beginning of team existence, when the swift trust is fragile ('strangers phase') (Mukherjee and Hanon, 2012, p. 53). It requires the team leader to state team goals and mission clearly in order to build team members' identification by tasks and roles division, delegating responsibility or supporting and monitoring the effectiveness of individuals (Lepsinger and DeRosa, 2010, pp. 33–42). The necessity to combine control and trust is often mentioned in sources dealing with global virtual team management (Krawczyk-Bryłka, 2016, pp. 1–13). Mukherjee et al. (2012, p. 532) call trust a form of 'informal control' that results in team motivation and identification.

Chutnik and Grzesik (2009, p. 86) notice that managing across cultures is a skill of great value in virtual team leader's case. It should be based on cultural sensitivity, which means readiness to notice, accept, understand and manage the cultural differences among team members and transfer this approach to all team members. Cultural sensitivity is one of the most important skills needed for all the participants of virtual collaboration (Michalak, 2012, p. 312). Guzman et al. (2010, p. 430) conclude that an efficient virtual global team manager needs to provide practices oriented towards communication management to avoid problems related to time zones, culture and language differences by skills integration and providing technology supporting communication and sharing knowledge. The literature also mentions some tools recommended for improving virtual cross-cultural collaboration, like CVS, Isabel, Moodle or Project Coordinator.

The important role of synchronicity and richness of communication media is often stressed, as the technical aspects influence virtual team integration and coordination (Hung, Nguyen, 2008, p. 4; Mukherjee et al., 2012, p. 536; Stefaniuk, 2014, pp. 56–60). The choice of media has decisive influence on the team's ability to fill the gap of shared context related to

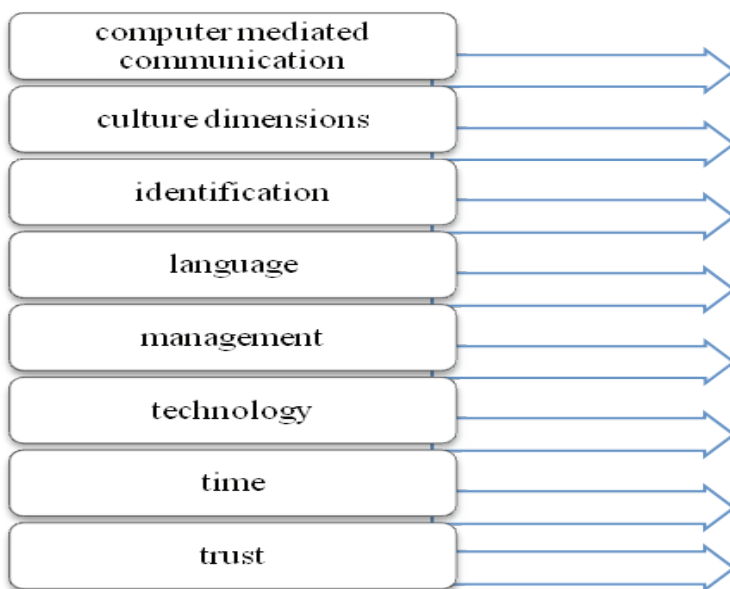
time, place and culture values. The team members' language proficiency can influence the choice of communication media (Klitmøller, Schneider and Jonsen, 2015, pp. 271–273). Poor linguistic skills can determine the choice of textual communication, which gives the chance to rethink and correct utterances, but can also discourage team members from communicating online. On the other hand, it reduces emotional context and smoothens interpersonal contact.

The next aspect of intercultural virtual collaboration refers to differences of cultural dimensions. They are usually discussed on the basis of Hofstede's dimensions (Cagiltay, Bichelmeyer and Akilli, 2015, p. 3). Team members representing individualistic cultures have weak ties, prefer to deal with tasks on their own and feel responsible for the effect. People from collectivistic cultures build strong relationships with peers and prefer to act and take responsibility collectively (Militru, Niculescu and Alexe, 2014, p. 18), while rapidly forming bonds based on loyalty and trust. There is positive correlation between collectivist orientation and such aspects as trust evaluation, perception of interdependence or openness to share information in order to complete the task (Mockaitis, Rose and Zettinig, 2012, pp. 202–208). The individualistic approach is related to task orientation, tendency to challenge majority positions (Han, Beyerlein, 2014, p. 11) and appreciation of personal achievement, innovation and autonomy, so the team leader needs to motivate the team members to collaborate with intrinsic motivators like personal development or future career, while presenting virtual collaboration as the chance to learn from others (Eom, 2009, p. 19). The leader working with collectivist members needs to stress their significance for the effect of team work, promote knowledge sharing, as well as reward open communication and integration. Different approaches and working styles are also challenges for team members. Mukherjee et al. (2012, p. 537) suggests that the best candidate for a global virtual team member is a person combining collectivism and low uncertainty avoidance. It provides high interpersonal trust and organizational identification, as well as

leads to strong positive effect of rich and effective media on organizational identification. The team members from low-context cultures are also said to be better prepared to collaborate in virtual environment – they usually feel more satisfied and are more efficient than members from high-context cultures (Han, Beyerlein, 2014, p. 11).

In conclusion, global virtual teams' collaboration is influenced by many challenges (mentioned in Figure 2) related to teamwork organization and relationships between members. They can be managed and lead to innovative, satisfactory results that justify cross-cultural virtual team creation.

Figure 2. Global virtual team challenges (sorted alphabetically)



Source: own work.

It is not obvious if these challenges should be seen as threats for global virtual teams. Magnuson, Schuster and Taras (2014, pp. 288–301) explain the mental distance paradox that exists in global virtual teams' case. They stress that real diversity is not equal to perceived differences between team

members. If the differences are not consciously noticed by team members, their influence on behaviours and efficiency can be minimal but they can also cause underestimation of the difficulties of working in cross-cultural teams. It is much better when team members evaluate the psychological distance as high because it usually triggers greater commitment to overcoming obstacles, motivates members to actively reduce uncertainty and allows for achieving superior performance. Thus the basic question seems to be if members of global virtual teams perceive the cultural differences and assess them as challenges for cross-cultural relations. The research results presented in the next part of the article refer to these questions.

Virtual intercultural collaboration challenges – research results

The participants of the research were 50 IT specialists, all having professional experience in virtual collaboration. Most of them are students of Master of Science studies at the Faculty of Electronics, Telecommunication and Informatics of Gdańsk University of Technology. Because the main aim of the research was to identify participants' perception of virtual team collaboration, the qualitative method was used. The results presented below are just a part of answers collected in an on-line interview performed in 2016, based on questions referring to intercultural relations.

The first part of the interview was related to the advantages of virtual cooperation. Half of the answers were related to the global nature of virtual collaboration. 15 specialists pointed to the possibility to cooperate with professionals from different countries as the most important benefit. They appreciate that virtual teams allow for contacting the best experts all over the world or using the international potential of team members when the availability in the local market is limited: *'It is much easier to find a person with needed competencies and knowledge when you can*

search much wider than in the local, national market', 'We work together – Poles, Turks and Germans – and it influences our collaboration very positively: since each person or team has their own idea how to resolve the problem, we can discuss it and choose the best option'. Some of the participants connected the unlimited geographical access to IT experts with some other advantages like language or intercultural competencies training: 'The advantage is the possibility of cross-cultural cooperation because it allows for using international networking, practising your English and getting to know the specifics of different cultures'. Some of interview participants stressed just the possibility to polish their English or to make the team better prepared for global market expectations: 'Working in a virtual team makes the contact with clients from different parts of globe easier. The final users of IT applications don't understand all the technical aspects clearly. Using a international virtual team to develop these applications provides a chance to understand their needs better and break the language and cultural barriers', 'The exchange of experiences and information about clients between team members from different countries lets us develop and offer more and more user-friendly applications not only in Europe but also in USA and Asia'.

Another sort of answers refers to different time zones. The IT specialists mentioned the possibility to work on projects permanently, without night breaks: 'Thanks to time differences we can delegate the task performance from one localisation to another and the process is not broken', 'Team members working in different time zones let the project last for 24 hours a day'.

Language barriers and time zones are also the most often pointed issues as the disadvantages of global virtual teams. Twenty respondents complained about the necessity to coordinate teamwork time: 'It is difficult to fix the optimum hour to meet together (Poland, Israel, USA)', 'Everyday schedule is determined by time zone differences', 'Their weekend starts on our Friday and working day is shifted by several hours. Additionally, all of us have flexible working time so we often can't receive fast answer

or help. Sometimes we have the response after a few days". There were some sarcastic comments about working time flexibility: 'The need to coordinate our work with team members from other countries forces flexible working hours', 'When the team is international, somebody needs to make a sacrifice for the others and be ready for meeting even outside the regular working hours'. Apart from these complaints some optimistic elements appear in respondents' answers: 'The additional challenge are the time barriers – we work with American partners now (9 hours time gap) and we sometimes need to adapt and have meetings very early in the morning or stay after our working hours. Despite this, our cooperation is pleasant', 'We had problems with time zone differences but we managed to deal with them thanks to special communicator called Slack, which delivers message in accordance with your time zone'.

Technical problems, connected with computer mediated communication, are sometimes discussed by research participants, but they usually refer to virtual collaboration regardless whether it is cross-cultural or not: *'Slow-speed Internet can be a problem, especially when we want to use voice communication or teleconferences', 'We have problems with Internet communicators — I think it is typical. We have tried different ones and we have finally decided for the one that never fails. But still there are some misunderstandings – it is much easier to explain or draw something when you communicate face to face'*. However, most opinions relate to the fact that the companies or teams the respondents collaborate within online use ITC solutions that help to overcome such difficulties: *'We have a lot of ICT tools we can use to coordinate and communicate, which helps us to achieve the desired effects. We complement online communication with videoconferences and meetings, which is enough for us'*. Some IT specialists mention also issues like national holidays or other non-working days as the difficulties connected with time.

A much more serious challenge in global virtual collaboration seems to be the language barrier that influences team efficiency: 'The language

barrier is often a problem in smooth project flow. Because of language and culture differences many good ideas are ignored or neglected', 'Sometimes the technical problems make the conversation difficult: if somebody is calling me when I drive a car or the sound quality during teleconference is poor, it is really difficult to understand them speaking in foreign language', 'Cooperation in a cross-cultural virtual team requires very good knowledge of English, but this is not always sufficient because foreign customers who know English sometimes have an accent that is difficult to understand and it is easier to communicate in writing than orally'. There are some complains about other nationalities, especially Indians, whose language competencies seem to be insufficient: *'Yes, we usually work in international teams (India and USA). We used to communicate by e-mails. The most frequent problem is understanding what our Indian peers want to say because their English is usually poor – especially written. In speech it is Hinglish but it is possible to understand. Speaking about Americans, we do not have communication problems but sometimes they use abbreviations of their everyday language'*.

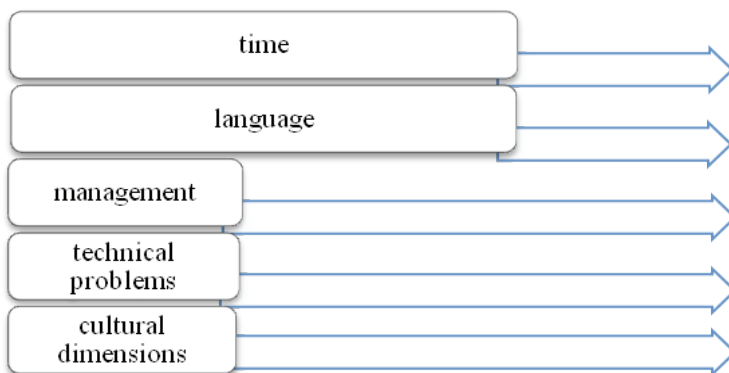
The interview participants rarely mentioned problems related to cultural differences based on culture dimensions. Most of them even when asked about them directly answered they have not noticed any: *'I have been working in an intercultural virtual team for just a few months and I haven't noticed any cultural differences that influence our work'*, *'Yes, I am working in a cross-cultural team – Germans, Brazilians, Poles – but there are no language and cultural problems in collaboration. The same refers to technical aspects. The only problem is time coordination, as we work in different time zones'*. Only a few respondents provided examples like: *'Our company is French and French people are convinced of their superiority, but they usually do much less than others. The problems are cultural differences and different work styles'*, *'Our team is international and people from some cultures can't say 'no'. They promise everything will be ready for yesterday and there is no effect finally'*.

Problems of team trust and team identification have not appeared in participants' statements, but answers referring to some nationalities (e.g. Indians) or a few answers stressing difficulties with communicating across borders can indicate the risk of forming subgroups or stereotyping. Challenges related to global virtual team management were rare and connected to time management and coordination: *'The need to coordinate and synchronize teamwork appears, to organize meetings that are available for people working in different time zones, which forces us to have them outside the working hours. It is a barrier in knowledge accessibility because it is distributed and held in local sub-teams – it is much easier to share it in traditional teams and it influences team effectiveness'*.

Conclusions

IT specialists experienced in on-line collaboration seem to be rather optimistic about global virtual teamwork but they are also conscious of challenges influencing their teams' effectiveness. 25 respondents perceived working in a cross-cultural virtual team as the source of additional value, but more, 38 respondents, pointed to it as the reason of numerous problems and challenges. The main ones are shown in Figure 3. In comparison to Figure 2, where the model concepts of global virtual teams challenges are mentioned, we can see the participants' opinions as limited to five categories: time zone differences and language barriers are the main ones. While speaking about time differences, the participants pay particular attention to the strong need of time coordination, which is strictly connected with global team coordination (management). When describing language barriers, the IT specialists complain about other team members' language skills and call them too poor (Indians' case) or not fitted to intercultural environment (American style).

Figure 3. Global virtual team challenges in IT specialists' perception



Source: own work.

Technical problems and cultural differences are additional issues and their importance seems to be inessential for the tested participants. Team trust and team identification have not appeared in respondents' answers, although they are very important for virtual collaboration. It entails the risk of distracting the team members from such problems and can provoke (according to the psychic distance paradox) passive attitudes towards these challenges. Another reason can be related to the fact that the tested global virtual team members may be collaborating in mature teams in 'partnership' phase, when interdependent collaboration, shared team mental model and trust are typical, or they can be managed effectively. This aspect was not taken into account in the research but nevertheless it can be an important factor influencing the perception of challenges. Another limitation of the tested group was the lack of representativeness and being limited to Polish participants, so it is difficult to assess if the global virtual team challenges concerning intercultural specification are the same for all team members. Anyway, the presented results can be an introduction to quantitative research considering global virtual collaboration.

An interesting result is the fact that the most important global virtual team collaboration challenges are perceived also as the most significant

advantages. In the IT specialists' perception it is a great opportunity to train language and intercultural competencies, as well as a benefit related to the possibility of permanent collaboration on the projects due to time zone differences. The participants also appreciate the opportunity to contact the best world experts and fit the international clients' needs much better while using global virtual team potential. It shows that global virtual collaboration, even if challenging, can be attractive for IT specialists – which seems to be crucial in the current IT labour market, where employers are competing for the best of them.

Bibliography

Child, J. (2001) *Trust – The Fundamental Bond in global Collaboration*. *Organizational Dynamics*, Vol. 29, No. 4, pp. 274–288.

Chua, R.Y.J., Morris M.W., Mor, S. (2012) *Collaborating across cultures: Cultural metacognition and affect-based trust in creative collaboration*. *Organizational Behaviour and Human Decision Processes*, no. 118, pp. 116–131.

Chutnik, M. and Grzesik, K. (2009) *Leading Virtual Intercultural Team. Implications for Virtual Leaders*. *Journal of Intercultural Management*, Vol. 1, no. 1, pp. 82–90.

Eom, M. (2009) *Cross-Cultural Virtual Team and Its Key Antecedents to Success*. *Journal of Applied Business & Economics*, Vol. 10, Issue 1, pp. 11–24.

Guzman, J.G., Ramos, J.S., Seco, A.A. (2010) *How to get mature global virtual teams: a framework to improve team process management in distributed software teams*. *Software Qual Journal*, no. 18, pp. 409–435.

Han, S.J. and Beyerlein, M. (2014) *Managing culturally diverse virtual teams: A systematic literature review*. Working papers. [Online], Available: <http://www.ufhrd.co.uk/wordpress/wp-content/uploads/2014/11/Soo-Jeoung-Han.pdf> [2.07.2016].

Hung, Y-T.C. and Nguyen M.T.T.D. (2008) *The impact of Cultural Diversity on Global Virtual Team Collaboration – A Social Identity Perspective*. *Proceedings of the 4th Hawaii International Conference on Systems Science*, pp. 1–10.

Klitmøller, A., Schneider, S.C. and Jonsen, K. (2015) *Speaking of global virtual teams: language differences, cosial categorization and media choice*. *Personnel Review*, vol. 44, no. 2, pp. 270–285.

Krawczyk-Bryłka, B. (2016) *Pomiędzy kontrolą i zaufaniem – jakich liderów potrzebują wirtualne zespoły projektowe*. *Przedsiębiorczość i Zarządzanie*, XVII, issue 2, part 2, ed. E. Stroińska, J. Trippner-Hrabi, pp. 67–81.

Lepsinger, R., DeRosa, D.M. (2010) *Virtual Team Success: A Practical Guide for Working and Learning from Distance*. John Wiley & Sons, Inc., San Francisco.

Magnusson, P., Schuster, A., Taras, V. (2014) *A Process-Based Explanation of the Psychic Distance Paradox: Evidence form Global Virtual Teams*. *Management International Review*, vol. 54, pp. 283–306.

Michalak, J.M. (2012) *Międzynarodowe zespoły wirtualne – zalety i ograniczenia*. *Zeszyty naukowe uniwersytetu Szczecińskiego*, nr 703. *Ekonomiczne Problemy Usług*, nr 88, pp. 307–316.

Militaru, G., Niculescu, C., Simon, C. and Alexe, C. (2014) *Culture in virtual teams*. *FAIMA Business & Management Journal*, vol. 2, issue 4, pp. 14–28.

Miroński, J. (2010) *Zarządzanie wiedzą międzykulturową*. e-mentor no.3 (35), [Online], Available: <http://www.e-mentor.edu.pl/artukul/index/numer/35/id/757> [2.07.2016].

Mockaitis, A.I, Rose, E.L., Zettinig, P. (2009) *The power of individual cultural values in global virtual teams*. *Cross Cultural Management*, vol. 12(2), pp. 193–210.

Mukherjee, D. and Hanlon, S.C. (2011) *Organizational identification among global virtual team members. The role of individualism-collectivism and uncertainty avoidance*. *Cross Cultural Management*, Vol. 19, no. 4, pp. 526–545.

Sobieraj, I. (2012) *Kompetencje międzykulturowe jako kapitał na rynku pracy*, in: A. Sadowski, K. Niziołek (Ed.), *Pogranicze. Studia Społeczne*. Vol. XX., pp. 161–174. Białystok. Uniwersytet Białostocki.

Stefaniuk, T. (2014) *Komunikacja w zespole wirtualnym*. Difin, Warszawa.

Tenzer, H., Pudelko, M., Harzing, A.W. (2013) *The impact of language barriers on trust formation in multicultural teams*. *Journal of International Business Studies*, no. 45, pp. 508–535.

Wickramasinghe, V., Nanuda, S. (2015) *Diversity team composition, relationship conflict and team leader support on globally distributed virtual software development team performance*. *Strategic Outsourcing: An International Journal*, Vol. 8, no. 2/3, pp. 138–155.

