Journal of Applied Linguistic and Intercultural Studies

journal home page: http://jalis.uni-ruse.bg/

Application of the Integrated Process Model of Intercultural Competence in the Design of Survey Tools

Diana Bebenova-Nikolova[1]

A R T I C L E   I N F O

A B S T R A C T

The purpose of the paper is to discuss the application of the Integrated Process Model of Intercultural Competence in designing a survey questionnaire and an in-depth interview scenario, which have been used in an empirical study to collect reliable statisitical and textual data on the process of acquiring intercultural competence in multicultural project teams. For this, the article first defines some terminology and explains why the dialectical approach to intercultural communication has been selected and incorporated in the Integrated Process Model of Intercultural Competence. Then it reveals how the same Model has been operationalized to design, validate and test the research tools to prove the reliability of the collected data. At this point, the paper presents some results from the empirical study on factors, influencing the process of acquiring intercultural competence and discusses them from the dialectical perspective. Finally it concludes that both the presented approach to designing of the survey tools, based on the Integrated Process Model and the tools themselves are important and useful as their application contributes to a deeper understanding of the dynamics of intercultural communication and indicates how intercultural competence could be managed for better team effectiveness. .

[1] "Angel Kanchev" University of Ruse (Bulgaria), PhD student at the Department of European Studies and International Relations

Corresponding author:
Diana Bebenova-Nikolova, Angel Kanchev University of Ruse, 8 Studentska Str., 7017 Ruse, Bulgaria
E-mail: dbebenova@uni-ruse.bg

1. INTRODUCTION

The article discusses the application of the Integrated Process Model of Intercultural Competence for the design of a qualitative and quantitative survey tools, which have been applied in an empirical study on the process of acquiring intercultural competence in multicultural teams functioning under the Romania - Bulgaria Cross Border Cooperation (CBC) Program 2007 – 2013. Based on the view that the analysis and mapping of the dynamic relationships in an organization can reveal the basic rules of the operation (Ghinea, Mihaylova & Papazov 2015), it could be suggested that a closer look at the dynamics in the project communication processes could reveal how intercultural competence is acquired and what its structural components are. For this purpose the dialectical approach (Martin & Nakayama 2010) to the study of intercultural communication is selected and its applicability is discussed in the theoretical background section. This section also provides some definitions on terminology used by the author and briefly describes how the dialectical point of view has been incorporated in the Integrated Process Model of Intercultural Competence by Bebenova-Nikolova (2016).

In the next part, the paper explains how this Process Model has been actually operationalized to design a research questionnaire and an in-depth interview scenario. These survey tools have been used for an empirical survey on the process of acquiring intercultural competence by members of cross-border projects. The paper briefly presents some results from the study and discusses how they reveal factors influencing the process of acquiring intercultural competence in real teams. Due to the application of the research instruments some valuable conclusions can be reached, which contribute to a deeper understanding of the dynamics of intercultural communication as well as team management issues related with intercultural competence.

2. THEORETICAL BACKGROUND

In this section the article defines terminology and discusses the dialectical approach, used for the design of the Integrated Process Model of Intercultural Competence (Bebenova-Nikolova 2016).

2.1. *Working definitions: cross-cultural, multicultural and intercultural*

Although the terms "cross-cultural", "multicultural" and "intercultural" sometimes are used interchangeably, this article considers them different and explains their specific concepts in the theoretical background of the Integrated Process Model of Intercultural Competence as well as in the Model itself.

Cross-cultural is adopted to describe the content of the box "Cross-cultural knowledge", meaning the factual comparative knowledge of cultural practices and their decoding in their own cultural environment.

Multicultural is used to depict the coexistent cultures in a team of individuals coming from dispersed geographical areas and cultural groups. In such an organizational structure a multitude of cultural traditions exist (in terms of memories, values, preferences, expectations, practices and attitudes) and in ideal conditions, coexistent cultures recognize each other's right to live in their own community as stated in Sarmento (2014).

The article uses the term *intercultural* to describe communication in multicultural project teams, meaning that such communication encourages support and the elimination of conflicts between cultural groups to achieve harmonious team relations.

2.2. *Dialectical approach explained*

Martin & Nakayama (2010) explore the different academic approaches (sociological, interpretative and critical) to the study of culture and communication and suggest a relevant taxonomy. These researchers clearly state the contribution of these concepts to understanding of the relationship between culture and communication. However, they don't avoid commenting on their limitations when explaining the cultural interactions. To overcome these limitations, they suggest the application of the dialectical approach to communication research on the grounds that:

- It provides a process approach to intercultural communication and thus presents not only static but also a dynamic picture of cultural interactions.

- The dialectical approach considers the different aspects of intercultural communication holistically (jointly), not separately as it takes into account interlinks between culture and communication.
- A third characteristic is the simultaneous discussion of contradictory ideas, which recognizes the interdependent and complimentary aspects of the seeming opposite. Martin & Nakayama (2010) suggest six dialectics (oppositions) to analyze intercultural relationships and discuss contradictory viewpoints:

<div align="center">

cultural ---------------------- individual

personal---------------------- social-contextual

differences ---------------------- similarities

static ---------------------- dynamic

present-future ---------------------- history-past

privilege ---------------------- disadvantage

</div>

To conclude, the dialectical perspective provides a process approach to intercultural communication, which if applied for research purposes, could reveal the process factors and their impact on the acquisition of intercultural competence. Furthermore, the simultaneous discussion of contradictory ideas (the six oppositions) to comment consequent research findings could help avoid some limitations and even national stereotyping in conclusions.

2.3. *Integrated process model of intercultural competence*

To analyze the process of intercultural communication in multicultural teams and its impact on the acquisition of intercultural competence, Bebenova-Nikolova (2016) adopts this dialectical concept and uses it to synthesize a conceptual Integrated Process Model of Intercultural Competence compiling ideas from previous models (Bebenova-Nikolova 2016). The diagram in Figure 1 describes a process the components of which are presented as boxes of various kinds and which are orderly connected with arrows. The flowchart should be read from left to right by following the forward arrows; the arrows leading backward turn the process into a cycle, thus showing the interminable nature of communication.

From the operational point of view, the diagram suggests that in a communication process when intercultural competence is performed, it leads to

outcomes, externally evaluated and personally reflected on, which on their turn enrich the knowledge on verbal and non-verbal codes and cross-cultural values, stored in our minds.
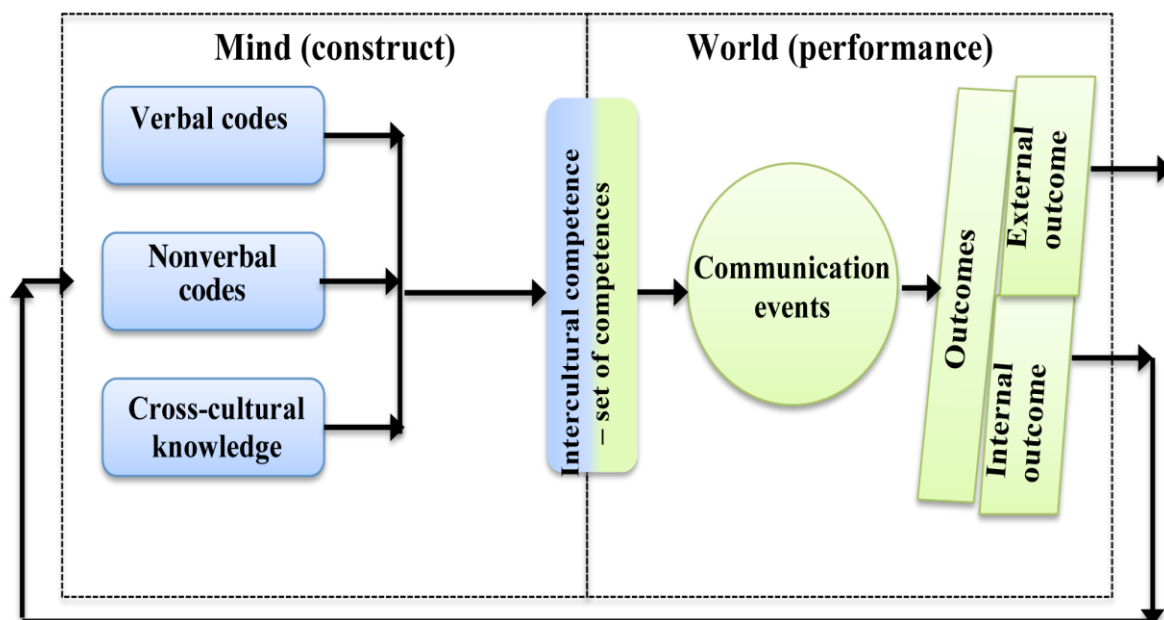
Figure 1 The Integrated Process Model of Intercultural Competence (Bebenova-Nikolova, 2016)

3. IMPLEMENTATION OF THE RESEARCH INSTRUMENTS IN AN EMPIRICAL STUDY

This section explains how the research instruments for qualitative and quantitative surveys are constructed through the operationalization of the components of the Model, then validated and implemented in an empirical study on intercultural communication. The explanation uses the flowchart boxes in the Model in Figure 1 and reveals how their content is interpreted on the principle of the "drop-down menu" to generate a list of surveyed characteristics of intercultural communication and competence.

Since the quantitative approach aims to acquire structured and statistical information on competences and communication events, the survey questionnaire explores the flowchart boxes in the Module "Mind (construct)", as well as the boxes "Intercultural competence" and "Communication events", which lie on the forward arrows from left to right in Figure 1. This approach leads to the operalization of the components as shown in Figure 2.

The qualitative survey focuses on the perceptions of the respondents on the impact of the studied components, built-up due to the intercultural reflection. Thus the questions for the in-depth interview focus on the boxes "Outcomes – internal and external outcomes" in Figure 1, which are further operationalized in Figure 3. Then, in the content analysis of the interview data, the six dialectics (Martin & Nakayama 2010) are applied to analyze the impact of the intercultural reflection, presented in the flowchart by the arrows leading backward.

3.1. *Design of the survey questionnaire*

3.1.1. *Questions on the module "Mind (construct)"*

As shown in the drop-down menu in Figure2, when evaluating the linguistic capabilities of the respondents (the box "Knowledge on the verbal codes"), the researcher used the European Language Framework in English, as this is the official language of the CBC Program. The researcher also explores the respondents' competence in the neigbours' native language – respectively Bulgarian or Romanian, as well as the usage of translation. Although the notion of "translation" cannot be associated with competence of a language code, it is used as a survey subcomponent on the ground that translation when frequently used in team communication mediates mutual understanding by the impact of the translator's work on the acquisition of intercultural competence. In general, the "Verbal code" component is surveyed by introducing 5 questions to evaluate its importance with a total of 39 variables. The questions exploring the manifestation of knowledge of the neighbouring national culture (the box "Cross-cultural knowledge") are included in the examination of the components "Interpersonal skills" and "Cultural empathy" from the box "Intercultural competence".

3.1.2. *Questions on the 'Intercultural competence' box*

The box includes: "Team effectiveness", "Interpersonal skills", "Cultural uncertainty" and "Cultural empathy" as shown in Figure 2. Each of these components comprises a set of specific skills/ variables, as described below:

Team effectiveness in multicultural teams was previously researched by Tirmizi (2008) and Matveev & Merz (2014). The specific status and functioning of project teams under the EU territorial cohesion programs urge team members to be very effective and use the limited resources smartly to achieve the project

goals, especially when working in a shared work environment. Therefore, to assess face-to-face communication, the study focuses on the organization and conduct of team meetings. The five questions are structured around the following features:

- planning the meeting and adherence to the preliminary agenda;
- reporting on task execution and evaluation of achievements;
- planning of the upcoming activities and assign responsibilities and deadlines;
- usage of visual means to assist communication in foreign languages;
- discussion on disputable topics to reach common understanding;
- wrapping up of the meeting.

Interpersonal skills enable the members to recognize the differences in communication styles among people of different cultures, be flexible in dealing with communication misunderstandings, and feel comfortable, when communicating with foreigners as Matveev (2002) states. For effective interpersonal communication team participants should be aware of their own cultural identity that influences decision-making processes. Questions are structured around these features, as shown in the drop-down menu in Figure 2.

Cultural uncertainty component reflects, in particular, the ability of team members to manage the feeling of insecurity in intercultural discourse, showing patience and tolerance to the uncertainty created by cultural differences as revealed by Matveev (2002). They have to be able to tolerate ambiguity and show flexible attitude to their team colleagues. This component has been also discussed by Hofstede (2001), who points out that multicultural teams with a high level of uncertainty tend to show more anxiety about communicating with people from different cultures. On the other hand, team members with a low level of cultural insecurity are more open to differences and likely to accept changes and risks (Hofstede 2001). Thus questions are structured around the features:

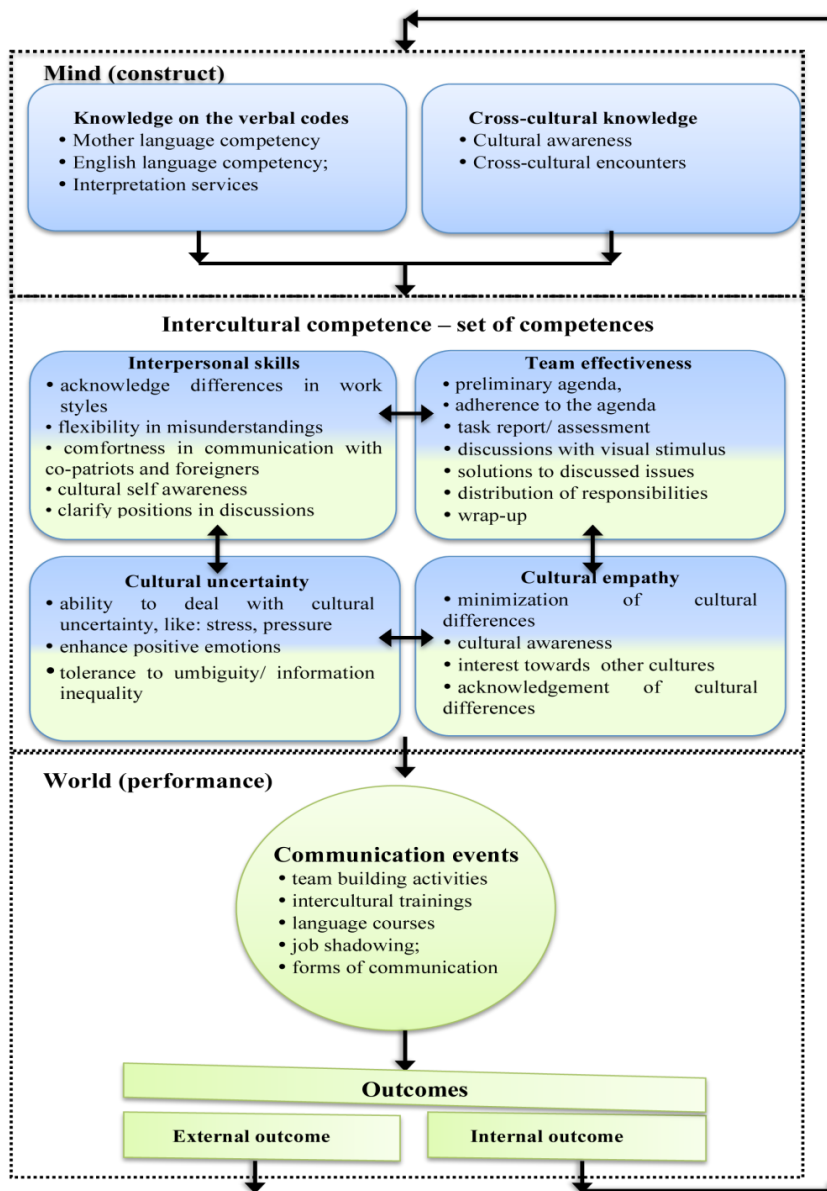- Ability to deal with the feeling of insecurity in another culture;
- Tolerance to ambiguity and uncertainty due to differences;
- Openness to cultural differences and risk taking;

Cultural empathy is the ability to show empathy to the other culture an important psychological predisposition for effective intercultural communication. Therefore, the members of the multicultural team should

develop the ability to see the world from the point of view of the other culture, to understand the cultural differences in the styles of work and communication. Questions are structured around the features:

- Ability to understand the world from other cultural points of view;
- Interest in other cultures and their models of communication;
- Recognize different styles of work;
- Adopting the position that things in other cultures are made differently, not "bad".

Thus, 11 questions with 30 sub-questions are formulated, 6 of which are Likert scale, while the other 5 provide multivariate answers.

Mind (construct)

Knowledge on the verbal codes
- Mother language competency
- English language competency;
- Interpretation services

Cross-cultural knowledge
- Cultural awareness
- Cross-cultural encounters

Intercultural competence – set of competences

Interpersonal skills
- acknowledge differences in work styles
- flexibility in misunderstandings
- comfortness in communication with co-patriots and foreigners
- cultural self awareness
- clarify positions in discussions

Team effectiveness
- preliminary agenda,
- adherence to the agenda
- task report/ assessment
- discussions with visual stimulus
- solutions to discussed issues
- distribution of responsibilities
- wrap-up

Cultural uncertainty
- ability to deal with cultural uncertainty, like: stress, pressure
- enhance positive emotions
- tolerance to umbiguity/ information inequality

Cultural empathy
- minimization of cultural differences
- cultural awareness
- interest towards other cultures
- acknowledgement of cultural differences

World (performance)

Communication events
- team building activities
- intercultural trainings
- language courses
- job shadowing;
- forms of communication

Outcomes

External outcome

Internal outcome

Figure 2 Structure of the survey questionnaire on the basis of the Integrated Process Model of Intercultural Competence

3.1.3. *Questions on the box "Communication events" in the module World (performance)*

The content of this box is explored by devising a question with six variable responses, covering the events realized according to the requirements of the CBC program (activities for team building, intra-team trainings for overcoming cultural differences, language training, job exchange and forms of communication, meaning telephone or internet communication events) and their impact on the development of cross-cultural values: (taking into account the cultural differences, combining the Romanian and Bulgarian methods of work).

There are also 4 questions examining the demographic characteristics of the respondents. Finally, the questionnaire contains 20 closed questions with 79 randomized sub-questions (variables) and multiple choices of answers.

3.2. *Design of the in-depth interview scenario*

The researcher uses this qualitative research tool to analyze the content of the 'Outcomes' box (internal and external) from the Integrated Process Model by using the drop-down menu as shown in Figure 3. A preliminary scenario was drafted which included seven questions for extracting narrative information on the boxes "Outcomes – external and internal outcomes" and examining the intercultural reflection process. The eighth question in the interview requires rating the components of the intercultural competence by using a numerical scale. The aim is to analyze the perceptions of these experts on the impact of the studied components.

The questions explore how the participants in cross-border teams have perceived and comprehended their intercultural experience, whether and how communication has influenced their intercultural competence. Getting personal interpretation on these issues might prove whether the intercultural reflection (Deardorff 2006) leads to accumulation in the knowledge database Mind (construct), which is indicated by the arrow leading backwards from the "World (performance)" module to "Mind (construct)" in Figure 3.
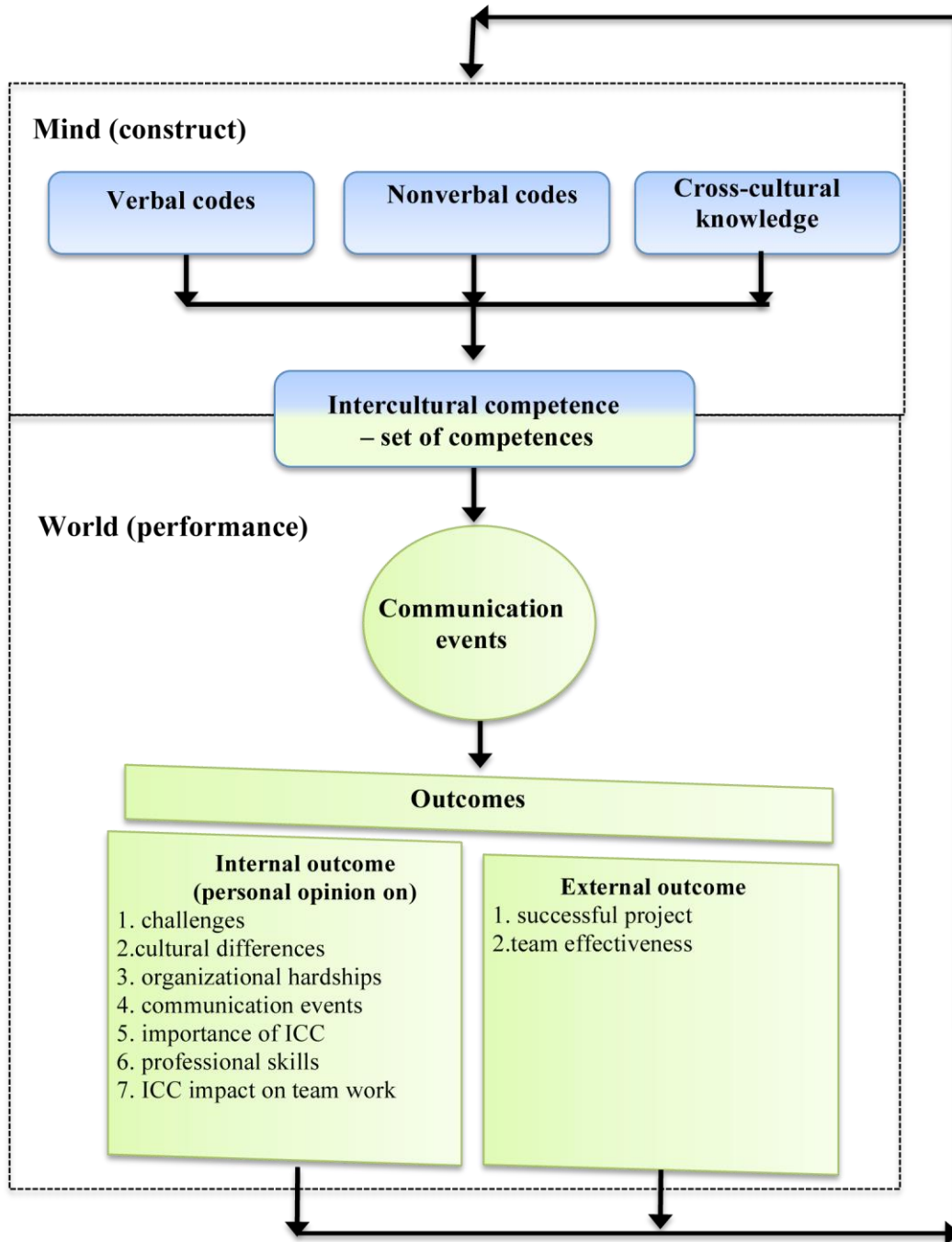
Mind (construct)

| Verbal codes | Nonverbal codes | Cross-cultural knowledge |

Intercultural competence – set of competences

World (performance)

Communication events

Outcomes

Internal outcome (personal opinion on)
1. challenges
2. cultural differences
3. organizational hardships
4. communication events
5. importance of ICC
6. professional skills
7. ICC impact on team work

External outcome
1. successful project
2. team effectiveness

Figure 3 Structure of the in-depth interview scenario following the Integrated Process Model of Intercultural Competence

3.3 Research procedures for the survey and interviews

The first step in the validation of the survey questionnaire was to gather a group of 10 multicultural team members, who assessed how effectively the questions capture the topic of acquiring intercultural competence. These respondents filled out a preliminary survey and made comments on the

questions relevance. Their recommendations were taken into consideration to re-construct the questionnaire, which was further pilot tested on 20 people. A similar validation procedure with 5 interviewees was elaborated for the in-depth interview scenario.

To avoid language ambiguities, first the researcher drafted the questionnaire in Bulgarian and then a translator of Bulgarian origin translated it into Romanian. Next, a second interpreter of Romanian origin crosschecked and edited the material to provide two identical questionnaires in two different languages.

Next, the researcher was authorized to access the CBC Program database of cross-border team members' email addresses and selected team members from successful projects. The questionnaire was emailed to 140 e-mail addresses of Bulgarian and Romanian participants in project teams, with 37 Romanian and 46 Bulgarian cards filled in and returned. The data collection period was 06 January 2016 – 30 April 2016. The researcher first tested the demographic data (gender, age, education, job) for the two national groups against any statistically significant differences by using SPSS. The tests showed no such differences in the demographic characteristics: gender, level of education and job with a risk of error a = 0.05. This conclusion classifies the collected data as statistically reliable and can be summarized for the Bulgarian and Romanian respondents. The subsequent descriptive analysis leads to conclusions on the linguistic competency of the respondents as a main prerequisite for acquiring intercultural competence. Then the empirical data is tested against the proximity to the normal theoretical distribution via the Kolmogorov-Smirnov test which shows abnormal distribution. This conclusion supposes the application of Pearson's correlation coefficient when testing the empirical data for correlations.

The conversations with 18 interviewees were conducted first personally, while note taking, then the notes were sent by e-mail to the interviewees for verification. Next, they were subjected to the methodology of the structural content analysis (Karshakova 2010), where language markers have been identified to indicate the specific components of intercultural competence and their relevance to the interviewees.

When discussing these markers, the research applies the dialectical approach with its three paradigms: focusing on the process, holistic exploration of different aspects of intercultural communication, and discussing contradictory ideas covering the six perspectives: cultural – individual, personal – social –

contextual, differences – similarities, static – dynamic, present / future – history/ past, privilege – disadvantage. The aim is to analyze the specifics and impact of the intercultural communication process and find out if the results of the encounters, expressed by the participants as personal evaluations, were comprehended through intercultural reflection and have led to knowledge accumulation and improvement of intercultural competence.

3.4 *Results of the empirical study and discussion*

Due to the application of the Integrated Process Model of Intercultural Competence into survey measurement tools as explained above, the process of acquisition of intercultural competence and its components in multicultural team members were researched. The survey revealed important results on the correlation and ranking of the components of the "Intercultural competence – set of competences", which clearly indicate how the management of such teams should be elaborated for better team and project effectiveness. Also, due to the operationalization of the Model and the application of the relevant measurement tools, different factors, influencing intercultural competence were assessed and measured, like: the linguistic competences in the native languages, the impact of English as lingua franca as well as the importance of the components: "Team effectiveness", "Knowledge on verbal codes" and "Communication events".

Thus, the designed measurement tools, based on the Model, contributed to a more comprehensive and thorough analysis on the process of acquiring intercultural competence in multicultural teams and the components that build up the intercultural competence.

4. CONCLUSION

The application of the Integrated Process Model of Intercultural Competence to design survey questionnaires provides a valuable approach on how a theoretical concept to intercultural communication and competence can be operationalized to define particular qualitative and quantitative tools. Thus this research work demonstrates a systematic and logical approach to the topic of intercultural competence and its assessment and deepens the link between theory and practice in the science of Intercultural Communication.

After validation and testing for reliability, the research tools have been put in use in an empirical study to assess the components of the intercultural

communication and competence and have led to the collection of both statistical and textual data, the analysis of which brings to valuable findings on the specific factors, influencing intercultural competence, like: linguistic competences in the neighbour's language, the impact of English as lingua franca on this type of competence as well as the importance of the components: "Team effectiveness", "Knowledge on verbal codes" and "Communication events". These conclusions suggest how multicultural teams can be trained and managed to improve project effectiveness. Therefore, the presented approach brings to the development of the project management as well.

The successful application of the Model for designing research tools suggests that it can also in similar research context, for example assessing the results from intercultural trainings.

REFERENCES

Bebenova-Nikolova, Diana. 2016. Integrated process model on intercultural competence. *Journal of Danubian Studies and Research* 6(2), 49 –59.

Deardorff, Darla. 2006. The identification and assessment of intercultural competence as a student outcome of internationalization at institutions of higher education in the United States. *Journal of Studies in International Education*, 10 (3), 241–266.

Ghinea, Valentina, Lyudmila Mihaylova & Emil Papazov. 2015. *Organizational Culture Dynamics. Complex Systems Dynamics.*

https://www.researchgate.net/profile/Valentina_Ghinea/publication/281676854_Organizational_Culture_Dynamics_Complex_Systems_Dynamics/links/56fb741708aef6d10d905a25/Organizational-Culture-Dynamics-Complex-Systems-Dynamics.pdf (accessed 10 April 2016)

Hofstede, Geert. 2001. *Kulturi i organizatsii: Softuer na uma* [*Cultures and Organisations: Software for the Mind*]. Sofia: Klasika i stil Publishing House. (in Bulgarian).

Karshakova, Rada. 2010. Content Analysis in the Research of Public Relations. *Methodology of interdisciplinary studies in the area of social sciences*, Published online by the University of Ruse, 76 –86

http://tiscass.uni-ruse.bg/sbornik-site.pdf (accessed 10 April 2016)

Martin, Judith & Thomas Nakayama. 1999. *Thinking dialectically about culture and communication*.

https://www.academia.edu/2450034 (accessed 29 May 2016).

Martin, Judith & Thomas Nakayama. 2010. *Intercultural Communication in Contexts*. 5th edn., McGraw-Hill.

Matveev, Alexei. 2002. The Perception of Intercultural Communication Competence by American and Russian Managers with Experience on Multicultural Teams. (Unpublished Doctoral Dissertation). College of Communication of Ohio University.

https://etd.ohiolink.edu/!etd.send_file?accession=ohiou1014904559&disposition=inline (accessed 4 April 2016)

Matveev, Alexei & Miwa Yamazaki Merz. 2014. Intercultural Competence Assessment: What Are Its Key Dimensions Across Assessment Tools. *Toward Sustainable Development Through Nurturing Diversity: Selected Papers from the Twenty First Congress of the International Association for Cross-Cultural Psychology*, 141 –153.

http://www.iaccp.org/sites/default/files/stellenbosch_pdf/Matveev.pdf   (accessed 4 April 2017)

Sarmento, Clara. 2014. Interculturalism, multiculturalism, and intercultural studies: Questioning definitions and repositioning strategies. *Intercultural Pragmatics* 11(4): 603 – 618.

http://iscap.ipp.pt/cei/docs/publicacoes_files/ip-2014-0026%20(1).pdf (accessed 29 June 2016)

Tirmizi, S. Aqueel. 2008. Towards understanding multicultural teams. In Halverson, Claire B. and S. Aqueel Tirmizi (eds.). *Effective Multicultural Teams: Theory and Practice*, Springer Dordrecht, 1 –20.

http://download.e-bookshelf.de/download/0000/0046/19/L-G-0000004619-0002369079.pdf (accessed 4 September 2016)

Author Biography

DIANA BEBENOVA-NIKOLOVA is a PhD student in General and Compartive Linguistics and a visiting lecturer in Intercultural Communication, Country Studies and Practical English at the "Angel Kanchev" University of Ruse. As such she has specialized at Danubius University, Galatz, Romania and Hubei University, Wuhan, China. At the same time Bebenova-Nikolova has been an intercultural trainer in non-formal education under a number of EU programmes.

Her research interests include Intercultural Communication and Competence in multicultural teams as well as management of such teams.

She has published articles in the *Journal of Danubian Studies and Research* and the *Annual Collection of Ruse University.*