Teaching Tolerance in the Context of Cross-Cultural Training of Future Professionals

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Abstract. The purpose of this study is to develop a tolerance training program for future professionals and to experimentally test its effectiveness in the process of cross-cultural preparation training.

The study includes four consecutive stages: preparation, diagnosing, the experiment and evaluation of results.

112 students of different nationalities were invited to participate in the study. They were split into an experimental (research) and a control group. A requirement for the control group was to participate in the survey at the beginning and at the end of the experiment. A requirement for the experimental (research) group was their cooperation throughout the experiment. Diagnosis of tolerance levels at the beginning of the experiment showed that most students had medium and low tolerance levels.

The coordinators developed a discussion club program "The Impact of Society on Tolerance and Values Formation." In 8 months The control survey results were processed with the methods of mathematical statistics and compared with the results of the diagnostic experiment. Comparison and analysis of the study results showed that the number of respondents in the experimental group with medium and high levels of tolerance increased significantly. In the control group, the results remained almost unchanged.

Our study has proved that the discussion club program "The Impact of Society on Tolerance and Values Formation" we developed may be implemented in different universities to foster tolerance of future professionals.

Key words: Tolerance; Culture; Education; Cross-Cultural Training; Experiment.

Introduction

It is difficult to overestimate the importance of tolerance issues. It is a universal principle of both the modern society as a whole and the modern cross-cultural education system in particular. There are two functions; vital for cross-cultural training: the compensatory function and the function of preserving the culture. The peacekeeping function is worth mentioning too since teaching and learning should be based on national traditions (for example, observance of Islamic codes of behavior during religious holidays, etc.). It is also important to

cultivate tolerance towards people of other cultures in future professional for them to be ready for the dialogue between USA, Western and Eastern cultures.

The interdependence of education and culture contributes to training future foreign language professionals as the individuals of a new formation able to develop the qualities that can help them quickly respond to change, adapt, and be resistant to uncertainty. The term "the person of culture" characterizes a new type of the future foreign language professional who recognize themselves as members of their culture, (capable of self-determination in the social and cultural space), tolerant and open to other cultures, able to interact with people of different cultures when studying.

We consider the cross-cultural training of the future professional in the context of the individual's living space and educational environment. This environment should be aimed at shaping the individual as a person of culture, capable of professional activity in a cross-cultural society. Personal characteristics of the future foreign language professional are important for cross-cultural education. After all, their values, motivations, tolerance, thinking style, etc., depend on their ability to not only integrate new experiences into their cultural system but also to communicate the values cultural system to the educational society.

The education system is faced with different challenges. With the arrival of students of different cultures, school becomes a richer cultural environment. This change in circumstances exposes professionals to a number of challenges. Among all the required competences of a professional, intercultural communication is becoming increasingly important by time and therefore it is necessary to point out its significance. The application of intercultural communication is a call for the respect of human and children's rights, accountability and acknowledgment of every individual's national and cultural background. Both national and international legal framework obliges us to implement it. National and international standards oblige us to its application (Dimitrijevic Tomic and Choeffel 2017).

Each subject has the potential to teach tolerance, but foreign language learning (English) has the most favorable atmosphere for teaching tolerance. Learning can be applied to the method of intercultural language learning. The process of developing tolerance values is promoted starting from the teacher who gives ethics and tolerance behavior in the classroom and school environment. In addition, class activities that support students to be able to continue to develop and sharpen their tolerance potential with interactive discussions or the use of supporting media. In this way students can develop a tolerant attitude towards themselves, empathy and tolerance in relationships with their classmates and teachers, and certainly in social life, today and in the future (Miftakh, F. & Wachyudi, K. 2019).

Communication is a process by which information is exchanged between individuals through a common system of symbols, signs, or behavior [3]. Intercultural communication (or cross-cultural communication) is a discipline that studies communication across different cultures and social groups, or how culture affects communication. It describes the wide range of communication processes and problems that naturally appear within an organization or social context made up of individuals from different religious, social, ethnic, and educational backgrounds. In this sense it seeks to understand how people from different countries and cultures act, communicate and perceive the world around them. Many people in intercultural business communication argue that culture determines how individuals encode messages, what medium they choose for transmitting them, and the way messages are interpreted (Lauring 2011).

Intercultural communication plays a role in social sciences such as cultural studies, anthropology, psychology, linguistics and communication studies. It also referred to as the base for international businesses. As a field of study, international management deals with inter-

firm and intra-firm processes that span national, cultural, geographical and linguistic boundaries. It centers on questions associated with multinational corporations (MNCs), international strategy, international human resource management, cross-cultural management, leadership and the general environment in which international management is practiced (Piekkari 2004).

The importance of cross-cultural communication leads to the success of any international business, to a worldwide marketing campaign, to an increase in international business. This allows the employees coming from different cultures to work together as a group. And to work effectively, members of any group be tolerant of each other.

Tolerance (from Lat. Tolerantia) means patience. Article 1 of the Declaration of Principles of Tolerance, endorsed by resolution 5.16 of the UNESCO General Conference of November 16, 1995, provides a thorough, comprehensive definition of tolerance (Declaration 1995). Here are just some quotes to define "patience." For example, patience is interpreted as respect, acceptance, and a proper understanding of the diversity of cultures in our world, our forms of self-expression, and ways of expressing human individuality. Patience is a virtue that makes peace possible and helps to replace the culture of war with a culture of peace. Patience is not a concession, condescension or indulgence, but rather an active attitude that is formed on the basis of the recognition of universal human rights and fundamental freedoms. Tolerance is a concept that denies the dogmatism, the absolutization of Truth, and which affirms the norms set out in international human rights instruments. Being tolerant does not mean tolerating social injustice, abandoning one's beliefs, or giving in to someone else's beliefs. This means that everyone is free to abide by their beliefs and recognizes the same right for others.

Such a wide-ranging definition of tolerance (patience) speaks of it as an integral characteristic of the individual, which can be studied in different angles: as psychological resilience, a personal characteristic, a system of attitudes and a system of personal and group values (Soldatova et al. 2008).

Psychological resilience has always been one of the most important characteristics that ensure a balance between the survival and adaptation of an individual, on one hand, and the assertion of his/her personality on the other one. The psychological resilience range can vary from neuro-psychological to socio-psychological characteristics. In the first case, the endurance or resistance of individuals to various influences, which they may consider "harmful", is assumed. Tolerance as psychological resilience is defined as the ability of individuals to withstand external influences that upset neuro-mental balance, and independently and quickly recover the peace of mind (Trifonov 2001). Socio-psychological resilience implies resistance to the diversity of the world, to ethnic, cultural, social and ideological differences. At this level, it is expressed through a system of social attitudes and values. This system, ideally based on the ability to maintain neuro-psychic balance in a variety of situations, should ideally be formed as a moral imperative of a mature personality. In this sense, psychological resilience serves as a special manifestation of the human spirit, its moral strength, and is the personal quality that can be called tolerance.

Researchers have shown that a mentally unstable person can be both tolerant and intolerant of different groups. However, high rates of psychological resilience are a favorable background for the development of tolerant attitudes. It is worth noting that tolerance from the standpoint of psychological resilience is a personality trait that one can develop. This means that teaching and learning can include both educational activities and, practical training to form the skills necessary to resolve conflicts, reduce aggression, participate in intercultural communication, prevent and overcome various forms of xenophobia, etc.

Tolerance as a personal characteristic is shaped by many factors and variables. They determine the overall positive orientation of the individuals based on their positive relations with others and the world, as well as to form their positive image.

Tolerance can also be explored as a system of attitudes and values of the personality and public consciousness. The studies of the basic types of social consciousness, consciousness of different social groups, segments of the population, focus on development of theoretically substantiated indicators of stratification of public consciousness, construction of its various types, analysis of the impact on each type of ideological, social and economic factors, and the influence of a certain type of consciousness on social processes and peculiarities of human behavior.

We consider tolerance in terms of personal characteristics of a future foreign language professional, which is closely linked to the ability to think critically, as discussed below. The tolerance of the future professional is realized first and foremost in interpersonal interaction. The personal and behavioral component of cross-cultural competence aims at characterizing tolerance as a trait of personality and, at the same time, as a behavioral manifestation of a future teacher in interaction with the people coming from various cultural backgrounds. Such a vision is based on the interpretation of tolerance offered by the Encyclopedic Dictionary of Friedrich Brockhaus and Elijah Efron in 1901. In this edition, the term "patience" is considered as a direction of the mind that is equally different from indifference (indifferentism) and a persistent recognition of the truth of only one's thoughts (fanaticism). Patience is a sign of a high culture of reason, the result of struggle and doubt; it manifests itself in respect for others' thoughts and beliefs (Encyclopedic Dictionary 1902). As we can see, tolerance (patience) is closely linked to critical thinking because it casts doubt on the absolute truth. Tolerance can be considered both in the personal aspect (as a personal quality and in the behavioral one, because it has the capacity to manifest itself not only in motives, thoughts and beliefs, but also actions.

It should be noted that tolerance cannot be endless in its manifestations. The manifestation of tolerance of different opinions and beliefs of individuals in order to find the truth corresponds to its very essence, as opposed to actions that must conform to the morals of society. This conclusion is in line with the opinion of the Encyclopedic Dictionary's authors: they believe the society and the authorities have the full right and ability to limit or even suppress the manifestation in the actions of certain thoughts and beliefs if they do not correspond to morality.

Method

The purpose of this study is to develop a program of tolerance teaching for future foreign language professionals and experimentally test its effectiveness in the course of their cross-cultural training.

Our experimental study included the following elements: determining the representativeness of the pilot study participants, justification of belonging of control and experimental groups to one and the same sampled population by means of mathematical processing of "Student's t-test" for independent variables; substantiation of the choice of research tools; qualitative analysis of the results of incoming diagnosis and determination of tolerance levels; formation of control group respondents' tolerance with the measures we proposed; assessing the effectiveness of these measures through re-diagnosis; comparison of tolerance levels using the Fisher multifunctional test; assessing effectiveness of the measures aimed at fostering tolerance in the process of cross-cultural training future foreign language teachers.

We used a mixed approach qualitative methods enabled us to identify significant socio-pedagogical aspects that influence the development of tolerance, and quantitative methods made it possible to quantify the research data, determine their quantitative characteristics, build mathematical models and clearly present the study results tables and diagrams.

Participants

Following these methods, we first determined the categories of respondents and higher educational institutions. We found that future specialists are trained in universities and colleges of Ukraine. The research group was selected at two universities. 112 master's students were invited to participate in the study. They were split into experimental (research) group and a control group. A requirement for the control group was to participate in the survey at the beginning and at the end of the experiment. A requirement for the experimental (research) group was their cooperation throughout the experiment.

Procedure

The study included stages. At the first stage (organizational), students were informed about the terms and conditions of the experimental study. The allocation to control and experimental groups was voluntary. As a result, the control group of 58 persons and the experimental one of 54 persons were formed.

At the second (diagnostic) stage, the coordinators developed a tolerance training program and selected diagnostic tools to test it. These tools were used to perform a diagnostic experiment. The purpose of the experiment was to assess the level of tolerance of all students in all groups. The results of the diagnostic experiment were processed with the mathematical data processing methods.

The third stage focused on, the experimental (research) group. For 8 months, they attended weekly meetings of the discussion club on the topic "Impact of Society on Tolerance and Values Formation" At the meetings, the participants analyzed pieces of fiction and movies, and discussed a wide range of real-life situations, including those caused by rumors, prejudice and intolerance towards individuals or groups of people.

Therefore, the members of the discussion club were interested in the problems of family and upbringing; the relationship between parents and children, the attitude of children to others, the problem of the environment in which children grow up.

They also discussed the problems of racism, the ways to combat prejudices, religious beliefs, and develop tolerance in conclusion, the students were offered examples of similar problems in the present-day society and encouraged to think what people can do together and individually to make the society more humane and tolerant.

A special topic of the discussion club was the discussion of a novel "To Kill a Mockingbird" by Harper Lee (published in 1960) and a movie of the same title, made in 1962 by director Robert Malligana. The film gained overwhelmingly positive reception from both the critics and the public. The film won three Academy Awards. In 1995, the film was listed in the National Film Registry. In 2003, the American Film Institute named Atticus Finch the greatest movie hero of the 20th century. In 2007, the film ranked twenty-fifth on the AFI's 10th anniversary list of the greatest American movies of all time. In 2005, the British Film Institute included it in their list of the 50 films we should see by the age of 14.

The book and the film present the most acute problems of mankind, which are relevant today. They contain injustice and cruelty, rejection of people due to differences of character and appearance, oppression and insidiousness. In addition to racial issues, the film tells the story of how two children from the world of fantasy take their first steps into a completely

different world - adolescents, where concepts such as responsibility, compassion and social inequality are formed.

Topics such as man and society, social inequality, discrimination, good and evil, justice and injustice, tolerance and faith in victory were discussed.

Therefore, the members of the discussion club were interested in the problems of family and upbringing; the relationship between parents and children, the attitude of children to others, the problem of the environment in which children grow up.

The coordinators prepared a list of questions to discuss:

1. Have your bias towards other people ever got confirmation? What did you feel then? Has it prompted you to ask yourself "How much do I depend on the opinion of the crowd? Is my point of view independent? "Am I a tolerant person?"

2. Is there a difference between the European tradition of tolerance and the Ukrainian one?

3. Can you convince yourself of the need to be tolerant, just because it is an imperative of our time? Can you tolerate different lifestyles, nationalities, races, cultures without any analysis and reflection?

4. Is it possible to change the beliefs of a racist? How?

5. Can people change themselves and become more tolerant under the influence of strong emotions and life circumstances?

6. Will you advocate for a person discriminated against just because he/she is not like everyone, regardless of the reason why? If not, why?

7. Are you afraid of being misunderstood and becoming an outcast?

8. Has your personality changed after you learned from your own experience that not all opinions about individuals are true?

9. Is it true that you cannot understand other people "until you've walked a mile in their shoes"?

At the fourth stage, after the discussion club program was completed, re-diagnosis was made in control and experimental groups using the same tools. The results of the control survey were processed by the methods of mathematical statistics and compared with the results of the diagnostic experiment.

Diagnostic tools

When empirically analyzing tolerance, scholars identify the following types: gender, age, education, inter-ethnic, racial, religious, geographical, inter-class, physiological, political, sexual, marginal tolerance, etc. (Matskovsky 2004).

Evidently, types of tolerance are not equivalent in terms of their impact on social tension and social conflicts. *Therefore, we have assembled them into 3 groups:* ethnic tolerance, social tolerance, and tolerance as a personality trait. In order to diagnose the general level of tolerance of future professionals, we used the express questionnaire "Tolerance Index" developed by psychologists Galina Soldatova, Lyudmila Shygerova and other authors (Soldatova et al. 2008).

The stimulating material of the questionnaire was made by statements that reflect both the general attitude to the world and other people, and social attitudes in different spheres of interaction where individuals' tolerance and intolerance are manifested. The methodology includes the statements that reveal communicative attitudes, attitudes toward certain social groups, etc.

Express Questionnaire "Tolerance Index" by Galina Soldatova et al.

Instruction: Please estimate how strongly you agree or disagree with the statements given and circle the figure accordingly.

№	Assertion	Absolutely disagree	Disagree	Rather disagree	Rather agree	Agree	Strongly agree
	Ethnic tolerance						
1.	In mixed marriages there are usually more problems than in marriages between people of the same nationality	6	5	4	3	2	1
2.	Caucasians will be better off if they change their behavior	6	5	4	3	2	1
3.	It's normal to think that your people are better than everyone else	6	5	4	3	2	1
4.	I am ready to accept as a family member a person of any nationality	1	2	3	4	5	6
5.	I want my friends to be people of different nationalities	1	2	3	4	5	6
6.	Some nations and peoples find it difficult to treat well	6	5	4	3	2	1
7.	I can picture a dark-skinned man as a close friend of mine	1	2	3	4	5	6
	Social tolerance						
8.	Any opinion can be expressed in the media	1	**2**	**3**	4	5	6
9.	Beggars and vagrants are themselves to blame for their problems	6	5	4	3	2	1
10.	It is unpleasant to talk to unkempt people	6	5	4	3	2	1
11.	All mentally ill people should be isolated from society	6	5	4	3	2	1

12.	Refugees should be helped no more than anyone else, since there are no less local problems	6	5	4	3	2	1
13.	A strong hand is needed to bring order to the country	6	5	4	3	2	1
14.	Newcomers should have the same rights as locals	1	2	3	4	5	6
15.	All religious movements have the right to exist	1	2	3	4	5	6
Tolerance as a personality trait							
16.	If a friend has betrayed you, you have to take revenge on him	1	2	3	4	5	6
17.	Only one point of view can be correct in a dispute	6	5	4	3	2	1
18.	Even if I have an opinion, I am ready to listen to other points of view	1	2	3	4	5	6
19.	If anyone acts outrageously with me, I do the same	6	5	4	3	2	1
20.	I get irritated by a person who thinks differently than I do	6	5	4	3	2	1
21.	The mess is very annoying to me	6	5	4	3	2	1
22.	I would like to become more tolerant to others	1	2	3	4	5	6

Determination of the level of tolerance.

For quantitative analysis, the total score (sum of points) is calculated without dividing by subscales.

22-60 points - low level of tolerance. This result is a sign of high intolerance and expressed intolerant attitudes towards the world and people.

61-99 points - average level of tolerance. This result is typical of the respondents who have both tolerant and intolerant traits. In some social situations, they behave tolerantly while in others may show intolerance.

100-132 points - high level of tolerance. These people are very tolerant. At the same time, very high scores (more than 115 points) may indicate blurred "tolerance" boundaries, such as psychological infantilism, tendency to indulge, indulgence or indifference. It is also

important to note that respondents who fall into this range may exhibit a high degree of social desirability (especially if they have an understanding of the problem and the goals of the study). For qualitative analysis of aspects of tolerance, the following subscales can be used:

I. **Ethnic tolerance**. Sub-Scale "Ethnic Tolerance" reveals the attitudes towards other ethnic groups and cross-cultural attitudes.

Up to 19 points - low;

20-31 - average;

32 or more points - high.

II. Social tolerance. The subscale "social tolerance" allows to study tolerance and intolerance of manifestation towards various social groups (minorities, criminals, mentally disabled people), as well as to study personal attitudes towards some social processes.

Up to 22 points - low;

23-36 - average;

37 or more points - high.

III. Tolerance as a personality trait. The subscale "tolerance as a personality trait" includes items that diagnose personal traits, attitudes, and beliefs that largely determine the attitudes to the outside world.

Up to 19 points - low;

20-31 - average;

32 or more points - high.

The proposed statements are divided into two types – direct and reverse. The numbers of direct statements are as follows: 4, 5, 7, 8, 14, 15, 18, 22. The number of reverse statements are as follows: 1, 2, 3, 6, 9, 10, 11, 12, 13, 16, 17, 19, 20, 21.

Respondents were asked to agree or disagree with the statements given. Each answer to the direct statement was assigned from 1 to 6 points ("strongly disagree" - 1 point, "strongly agree" - 6 points). Reverse points were assigned to the answers to the reverse statements (6 points - strongly disagree, 1 point - strongly agree). The points given were summed up.

For quantitative analysis, the points were summed up without any subscales.

22-60 points - low level of tolerance. This result is a sign of high intolerance and expressed intolerant attitudes towards the world and people.

61-99 points – average level of tolerance. This result is typical of the respondents who have both tolerant and intolerant traits. In some social situations, they behave tolerantly while in others may show intolerance.

100-132 points - high level of tolerance. These people are very tolerant. At the same time, very high scores more than 115 points) may indicate blurred "tolerance limits" related to, for example, psychological infantilism, tendency to indulgence, indulgence or indifference. It is also important to note that respondents who fall into this range may exhibit a high degree of social desirability (especially if they have an understanding of the problem and the goals of the study).

Evaluation

Diagnosis of tolerance levels conducted at the beginning of the experiment suggests that almost the same ratios of high, medium and low tolerance levels were detected in the control and experimental groups at the beginning of the study. Overall, the majority of respondents (72.4% of the control group (42 students) and 62.5% of the experimental group (35 students) had an average level of tolerance. 20.7% of the control group (12 students) and 28.5% of the experimental group (16 students) showed a low level of tolerance, with 6.9% of the control group (4 students) and 5.4% of the experimental group (3 students) showing a high

level of tolerance/ Table 1 presents the revealed tolerance levels.

Table 1
Tolerance levels in control and experimental groups at the beginning of the experiment

№	Tolerance level	Control Group (CG) (58 people)		Experimental Group (EG) (54 people)	
		Number	**%**	**Number**	**%**
1.	High (100-132 points)	4	6/9	3	5/4
2.	Medium (61-99 points)	42	72/4	35	62/5
3.	Low (22-60 points)	12	20/7	16	28/5
	Total	58	100	54	100

The diagnosis of tolerance levels suggests that most respondents in the control and experimental groups (77 out of 112, 68.75% had an average tolerance level. A low level of tolerance was found in 28 individuals (25.00%). A high level of tolerance was found in 7 people (6.25%).

Figure 1 presents generalized tolerance level ratios.
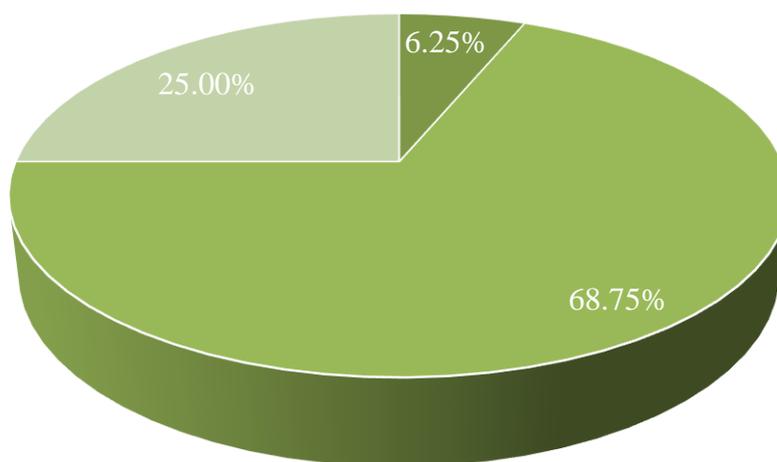
High   Medium   Low
Fig. 1. Tolerance level ratios at the beginning of the experiment

For qualitative analysis of the level of tolerance, we the level of ethnic and social tolerance and tolerance as a personality trait. We found that the index of social tolerance (attitude to different social groups, including minorities, criminals, and mentally disabled people) was the highest. The index of ethnic tolerance (attitude towards people of other races and ethnic groups, respondents' ethnic groups, cultural distance assessment) was the lowest. This means that when constructing the content of cross-cultural training of foreign language professionals, particular attention should be paid to the development of ethnic tolerance.

At the end of the school year, re-diagnosis was made in the control and experimental groups using the same tools. Table 2 presents the results tolerance level assessments.

*Table 2: Tolerance **levels control and experimental groups at the end of the experiment***

| №	The level of tolerance	Control Group (KG) (58 people)				Experimental Group (EG) (56 people)			
		Before		After		Before		After	
			%		%	Number	%	Number	%
1.	High (100-132 points)	4	6.9	5	8.7	3	5.6	9	16.7
2.	Medium (61-99 points)	42	72.4	41	70.6	35	64.8	41	75.9
3.	Low (22-60 points)	12	20.7	12	20.7	16	29.6	4	7.4
	Total:	58	100	58	100	54	100	54	100

There was virtually no change in the control group. The number of persons with high tolerance increased from 4 (6.9%) to 5 (8.7%). The number of persons with average tolerance decreased by 1 from 42 individuals (72.4%) to 41 ones (70.6%). The number of persons with low tolerance remained at 12 (20.7%). In this way, the level of tolerance remained almost unchanged in the control group.

At that, there was change in the experimental group. The number of persons with high levels of tolerance increased significantly from 3 people (5.6%) to 9 (16.7%). The number of persons with average tolerance increased from 35 (64.8%) to 41 (75.9%). The number of persons with low tolerance decreased significantly from 16 (29.6%) to 4 (7.4%). Generalized levels of tolerance before and after the experiment are presented in Figure 2.

Before the experiment   After the experiment
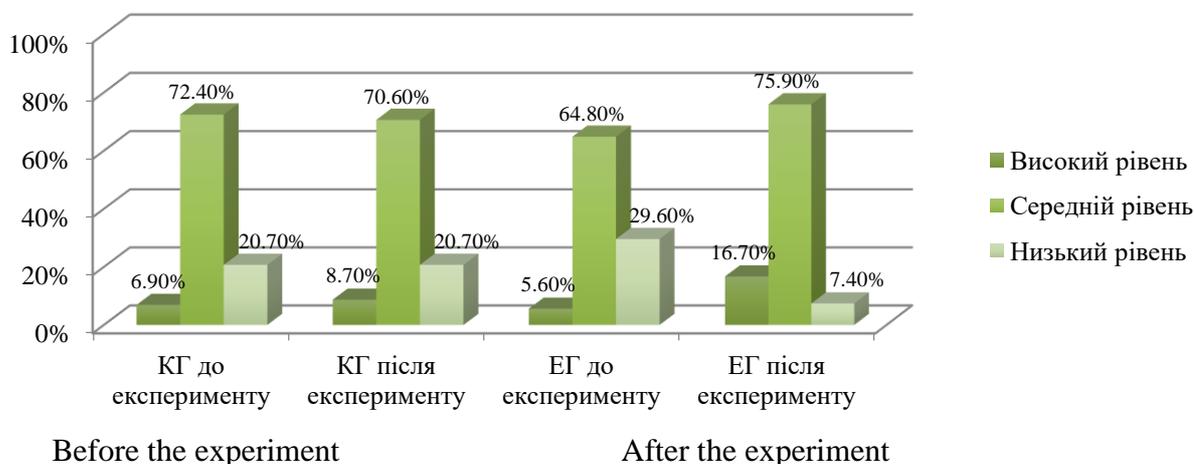
Fig. 2. Tolerance levels before and after the experiment

Figure 3 presents generalized tolerance level ratios in the experimental group.
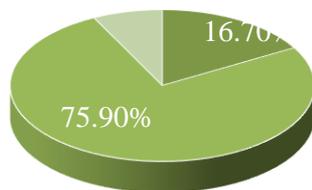
　　　　　　　　■ Високий　　■ Середній　　■ Низький

High　　　　Medium　　　　Low

Fig. 3. Tolerance level ratios in the experimental groups after the experiment

To statistically compare the results of the revealed tolerance levels in the experimental group, we used the Fisher multifunction test.

At the beginning of the experiment, the number of respondents in the experimental group with medium and high tolerance was $35 + 3 = 38$ people (70.37%) out of 54 (100%). After the experiment, the number of respondents with medium and high levels of tolerance was $41 + 9 = 50$ people (92.59%) out of 54 (100%).

Before the experiment, the number of respondents in the experimental group with low tolerance was 16 (29.6%) out of 54 (100%). After the experiment, the number of respondents with low tolerance was 4 (7.4%) out of 54 (100%). This tolerance level dynamic made it possible to formulate the following hypotheses:

H0: The number of respondents in the experimental group with medium and high levels of tolerance before the experiment is lower than after it. It proves the developed program to be effective.

H1: The number of respondents in the experimental group with medium and high levels of tolerance before the experiment is greater than after it. It proves the developed program to be.

To calculate the criterion φ *, a four-cell table of the tolerance level dynamics was constructed (see Table 3). Using the table of critical values of the Fisher criterion φ * (Sidorenko 2006), we determine the quantities φ * corresponding to the percentage of the "dynamics" in each of the groups.

Table 3

Four-cell table of tolerance level dynamics in the experimental group

Experimental group	**Increasing dynamics**			**Decreasing dynamics**			**Total**
	Number of respondents (high, medium levels)	**%**		**Number of respondents (low level)**	**%**		
Before the experiment	3+35=38	70.3		16	29.6		54 (100%)
After the experiment	9+41=50	92.5		4	7.4		54 (!00%)

$φ*_{(70,3\%)} = .,989$　　　$φ*_{(92,5\%)} = 2.587$

We calculated the empirical value of φ * by formula 1:

φ * (70.3%) = 1.989 φ * (92.5%) = 2.587

66

$$\varphi_{\text{емп}}^* = (\varphi_1 - \varphi_2) \times \sqrt{\frac{n_1 \times n_2}{n_1 + n_2}}$$

(1)

Consequently,

Where: φ_1^* − the angle corresponding to the greater percentage;

φ_2^* - the angle corresponding to the smaller percentage;

n1 is the number of observations in sample 1;
n2 is the number of observations in sample 2.
The result is as follows:

$$\varphi^* = (2{,}587 - 1{,}989) \times \sqrt{\frac{54 \times 54}{54 + 54}} = 0{,}59 \times \sqrt{\frac{2916}{108}} = 0{,}59 \times \sqrt{27} = 0{,}59 \times 5{,}1961 = 3{,}06$$

We defined the critical value that corresponds to the levels of statistical significance accepted in psychology:

$$\varphi_{\text{кр}}^* = \begin{cases} 1{,}64 \ (\rho \le 0{,}05) \\ 2{,}31 \ (\rho \le 0{,}01) \end{cases}$$

$$\varphi_{\text{емп}}^* = 3{,}06$$

$$\varphi_{\text{емп}}^* (3{,}06) > \varphi_{\text{кр}}^* (2{,}31)$$

Since $\varphi_{\text{емп}}^*$ is in the value zone, we can conclude that hypothesis H0 has been confirmed. The number of respondents in the experimental group with medium and high levels of tolerance was lower before the experiment than after it. It proves the developed program to be effective.

Comparison of the ratios of experimental group participants with medium and high tolerance levels before and after the experiment made it possible to prove the reliability of the obtained results.

Conclusions.

The study confirms the actual value of fostering tolerance in the context of cross-cultural training for future foreign language professionals. At the stage of the diagnostic experiment, control and experimental groups were surveyed to identify their tolerance levels. The results of the experiment were processed by the methods of mathematical data processing.

On the basis of the diagnostic experiment, weekly meetings of the discussion club "The Impact of Society on Tolerance and Values Formation" were planned and held. The meetings were held only for the experimental group. At the meetings the works of art, movies and real-life situations were analyzed. Such teaching methods as visualization, conversations, and discussion were used. At the meetings the participants were encouraged to freely express their thoughts and describe their experience. There was no evaluation of their achievements. All thoughts and opinions were tolerated.

At the end of the program the control and experimental groups were re-surveyed. The results of the control experiment were processed by the methods of mathematical data processing, compared with the results of the diagnostic test and presented in tables and diagrams. The comparison and analysis of the results proved the developed program to be effective since the number of respondents with medium and high tolerance levels in the experimental increased by 22.2%. The program changed students' attitudes towards people of different lifestyles, nationalities races, or cultural backgrounds.

Thus, we can conclude that the meetings of the distance club "Impact of Society on Tolerance and Values Formation" may prove useful for universities to foster tolerance in future professionals.

References

Dimitrijevic Tomic, M., Choeffel, V. (2017):Why teachers need to know about intercultural communication. *Plus Education,* 17 (1). https://uav.ro/jour/index.php/jpe/article/view/776/

Miftakh, F. & Wachyudi, K. (2019). Teaching Tolerance through Intercultural English Language Learning to Elementary Students. ELT in Focus, 2(2), 41-50. doi: 10.35706/eltinfc.v2i2.3053.
https://journal.unsika.ac.id/index.php/ELTINFOCUS/article/view/3053

Lauring, J. (2011). Intercultural Organizational Communication: The Social Organizing of Interaction in International Encounters. *Intercultural Journal of Business Communication*, 48 (3), 231–255. https://journals.sagepub.com/doi/10.1177/0021943611406500

Piekkari, R. (2009). International management. *The handbook of business discourse*, 269-278.

Declaration of Principles of Tolerance. (1995). https://unesdoc.unesco.org/ark:/48223/pf0000151830

Soldatova, G., Shaigerova, L. (2008). *Psychodiagnostics of personality tolerance: A practical guide.* Moscow: Smysl. (in Ros.). https://istina.msu.ru/publications/book/855885/

Triphonov, E.B. (2001). Human Psychophysiology. Explanatory Russian-English Dictionary. (in Ros.). http://www.oocities.org/tryphonov1/

Encyclopedic Dictionary. (1902). SPb: *Printing house Brockhaus-Efron Joint-Stock Company*, XXXIV a, 61-62. (in Ros.). https://ru.wikisource.org/wiki/Энциклопедический_словарь_Брокгауза_и_Ефрона

Matskovsky, M. (2004). Tolerance as an object of sociological research. *Intercultural dialogue: research and practice*, 143-147. (in Ros.).

Sidorenko, E. (2006). *Methods of mathematical processing in psychology*. SPb: Riech. (in Ros.).