

The Implicit Methods for the Study of Tolerance

M. Bambulyaka

Abstract—Tolerance is a tool for achieving a social cohesion, particularly, among individuals and groups with different values. The aim is to study the characteristics of the ethnic tolerance, the inhabitants of Latvia. The ethnic tolerance is taught as a set of conscious and unconscious orientations of the individual in social interaction and inter-ethnic communication. It uses the tools of empirical studies of the ethnic tolerance which allows to identify the explicitly and implicitly levels of the emotional component of Latvia's residents. Explicit measurements were made using the techniques of self-report which revealed the index of the ethnic tolerance and the ethnic identity of the participants. The implicit component was studied using methods based on the effect of the emotional priming. During the processing of the results, there were calculated indicators of the positive and negative implicit attitudes towards members of their own and other ethnicity as well as the explicit parameters of the ethnic tolerance and the ethnic identity of Latvia's residents. The implicit measurements of the ratio of neighboring ethnic groups against each other showed a mutual negative attitude whereas the explicit measurements indicate a neutral attitude. The data obtained contribute to a further study of the ethnic tolerance of Latvia's residents.

Keywords—ethnic tolerance, implicit measure, priming, ethnic attitudes

I. INTRODUCTION

THE distinction between "us" and the "aliens"—one of the most ancient distinctions in the human history. A cautious attitude towards another, strange and unknown is the quality necessary for the human existence and the human society. The archaic nature of the division between "us" and "aliens" is still existing in our days, making the psychological basis of fear of changes in the usual course of events. The reasons for this are considered in many psychological theories and, virtually, all existing theories posit inevitability the fact of the out-group aggression [1]. Intolerance as a psychic phenomenon is clear, grounded by theoretical and empirical developments and is biologically, socially and a historically conditioned companion of the man's existence. However, the community development, globalization processes and inappropriateness of the intolerant behavior in civilized relationship help to create categories that must be countered to the mechanisms of a hostile suspicion to the "aliens". This category in the today's world is tolerance.

II. OVERVIEW OF THE LITERATURE AND PROBLEM STATEMENT

In today's world to be tolerant is the norm and people are rarely willing to admit their intolerance. The study of the phenomenon of tolerance is complicated by the so-called declared tolerance. In most cases, the declared tolerance appears as a substitute for "I – the real", "I - the perfect" but it can be based on other mechanisms. The researchers identify

the "passive tolerance" as well, characterized more as an actual indifference to the object of tolerance but declared in the «right" categories of the active tolerance. In contrast to the declared or passive tolerance, the active tolerance is characterized by an active start, the presence of at least some interest to representatives of an alien culture, i.e., the active positive emotional component. At the same time, the negative emotional component does not necessarily indicate a lack of tolerance - as mentioned above, the negative emotional component can be balanced with the positive cognitive one.

At the base of tolerance, there is either a lack of grounds for a negative reaction to the object of tolerance or a conscious inhibition of negative impulses. Some researchers call the lack of grounds for a negative reaction as a natural tolerance [5]. In our view, this situation presents a challenge both for the researcher as the lack of negative reactions to the object of tolerance, in fact, indicates either an indifference or sympathy with the object rather than tolerance.

According to A.P. Grechko, indifference or lack of a pronounced emotional component is a form of "degeneration of tolerance" [6]. Indifference suggests that the object of indifference is insignificant to the subject of tolerance; therefore, the mechanism of tolerance in the situation of indifference is not claimed. Indifference extends around passivity while tolerance, moving from indifference to a conscious controversy, adjusts the subject of tolerance to an active and involved stance.

At the same time, the presence of a positive emotional component and the absence of adverse reactions may indicate sympathy of the subject to the object of tolerance and as a consequence of the manifestation of tolerance. However, tolerance is a distinct psychological phenomenon, not an analogue of not liking. Therefore, for the appearance of tolerance there is required a sufficient distance between him and others. Where the distance is minimal, tolerance is not needed, when the distance is too great - it is governed by certain external standards [6]. Thus, in the psychological studies of tolerance, there should be distinguished particular manifestations of this phenomenon.

In this study, we consider the natural tolerance as a search for an alternative identity, oriented to the similarity [4], in the context of the ethnic distance of the Latvians and the Russians, living in Latvia. The distance between these two cultures is repeatedly publicized in the writings of scholars [7], [8], [9]. At the same time, important in the understanding of the ethnic tolerance is the fact that the subjects of tolerance have some influence on the object of tolerance - that is, having a real opportunity to influence the object, the subjects of tolerance refrain from imposing their position [5].

Modern theories of tolerance in social psychology are diverse, so it is quite difficult to establish a certain set of characteristics of tolerance and to identify a model. The psychological literature discusses a number of concepts similar to those of tolerance developed by the major

psychological schools and approaches. Thus, in psychoanalysis, the analogue of tolerance is the system of defense of human mechanisms, in the cognitive approach, tolerance - a system of structuring in the mind of heterogeneous and contradictory social objects, in behaviorism - a system of knowledge and skills that combines the behavioral repertoire of a man, in the humanist approach, tolerance - a strategy to achieve self-actualization, etc. [4].

In keeping up with trends in cognitive areas, we consider the ethnic tolerance as a two-dimensional cognitive construct that includes explicitly and implicitly components.

In the explicit content, we identify three common levels – the cognitive, affective and behavioral components, leaving the "primacy" to the cognitive tolerance that can rationally and reasonably restrain emotions and feelings of failure. Understanding, awareness of differences and the ability to restrain negative reactions towards the object of tolerance are often seen by researchers as the main feature of the phenomenon of tolerance [19], [11], [12].

The implicit content of tolerance has its origin in unconscious mental processes. Following the authors of the meta-cognitive model of the implicit and explicit relationship constructs, we consider the ethnic tolerance as an ambivalent attitude [13].

During the development, the psyche forms systems of individual, select, conscious or unconscious, links of the individual with various factors of the objective reality and the system is filled with the estimates of these factors. Thus, a relation of the individual is formed a connection, which contains an assessment [5].

Conscious and intuitive relations are considered by us as drawing near to the explicit and implicit manifestation of tolerance / intolerance. The origin of an informed, explicit mental construct of tolerance in our understanding is based on the processes of making certain judgments about the object of tolerance. In the processes of forming an implicit psychic construct, a large role is played by the experience and information about the object of tolerance which is stored in the memory of the subject of tolerance, forming a network of associations, often unconscious for the subject of tolerance. This unconscious associative network forms the implicit attitude to the object of tolerance.

In this study, we attempt to explore two levels of tolerance – as conscious and unconscious by the subject. We believe that the perceivable level of tolerance is the result of understanding and structuring the consciousness of social objects that act as causes of changes in the social attitudes, cognitive scripts.

However, collisions with these socially significant objects contribute to the emergence of attributions, semantic units, states of cognitive dissonance, the effects of social perception, social mainstream stereotypes and prejudices which are often unconscious and automatic in their nature (S. Moscovici, E.. Yakimova, J. Turner, F. Heider, L. Festinger, A. Bodalev, I. Kon et al). Therefore, it seems important to study the unconscious level indicators of the ethnic attitude which is the basis of the ethnic tolerance.

Studies of the implicit mental constructs show different, often contradictory results. At the moment, the explicit and implicit measurements are usually considered as

complementary and depending on the objectives of the study, allowing obtaining a more complete picture of the research [14].

We consider the implicit content of the ethnic attitude as a result of experience, accumulated in the development of the individual [15]. The study of the implicit level of the ethnic tolerance allows us to study aspects of the inter-ethnic relations, self-report methods that are not generally available. The experience in measuring implicit constructs shows that the discrepancy between the explicit and implicit measurements is related to the fact that both types of measurements are focused on different aspects of one phenomenon and each type of measurement has its own characteristics. Thus, the implicit attitudes are more stable and less susceptible to situational influences, in contrast to the explicit attitudes. Here, the implicit attitudes in nature are more linked with the emotional environment of the individual while the explicit attitudes draw on the cognitive one [16].

The understanding of tolerance in the two levels of its manifestation, allows us to consider this phenomenon in the context of its development and formation, given the current state. This allows for a more complete analysis and study of the ethnic tolerance in our study, the representatives of the two largest ethnic groups in Latvia.

We view this research as the first step in studying the implicit level of the ethnic tolerance of Latvia's residents. The emphasis was laid on the comparison of the modality of the implicit and explicit levels, in order to further develop the research methodology of the content of the ethnic tolerance of the inhabitants of Latvia.

The phenomenon of the ethnic tolerance is closely related to the ethnic identity of the individual. We use the theoretical - and methodological development of ethno-psychology and ethno-sociology based on the theory of the social identity proposed by H. Tajfel – J. Turner, the theory of a study of ethnic orientations developed by J. Berry and methodological developments developed by N.M. Lebedeva and G.U. Soldatova, according to which, the ethnic tolerance can be investigated through the study of the ethnic orientations [17], [18], [19], [20]. Therefore, we study indicators of the ethnic identity which will allow us to have a better idea about the structure of the ethnic attitude.

In order to better understand the differences in the explicit and implicit measurements, we also study the level of self-monitoring of the respondents in order to determine whether they are potentially willing to adapt to the situation. Individuals with a high self-monitoring are more flexible and adaptable to the current situation, individuals with a low self-monitoring are more principled, less flexible and tend to keep their beliefs regardless of the situation [21].

In this research, we consider the overall picture of the relation of the implicit and explicit components of the ethnic tolerance as part of the ethnic attitude. To accomplish the objectives of the research - the study of a two-level model of the ethnic tolerance - we have structured sequential blocks of problems: a study of the emotional component of the implicit content of the ethnic attitudes, the explicit study of the level of the ethnic tolerance, the measurement of the ethnic identity and level of self-monitoring of the respondents.

III. MATERIALS AND METHOD

A. Sampling

The research was conducted in 2010 with the participation of the Latvian ethnicity who identify themselves with the Latvian culture media and representatives of the Russian ethnic group who consider themselves the bearers of the Russian culture. The sample included 144 respondents with the mean age of the research participants 25.06 (min. 16 years, max. 60 years). The mode of sampling: 17 years. The method of forming: the use of real groups. The procedure for the study took about 35 minutes, including the implicit and explicit components of the study. The respondents performed the task of an implicit test and then completed a questionnaire and explicit methods. After the procedure, the respondents were informed about the true purpose of the research.

B. Measurements

The implicit component was measured using special software to identify the implicit relationship. The diagnostic aim of the method is measuring the emotional component of the attitude by fixation of the reaction time of the respondent to the target stimuli depending on the test stimuli. The priming effect is an indicator of an automatic evaluation. Before the implicit study, the participants took a training test to adapt to the regime of a rapid change of the stimuli and a maximum response to them.

To study the performance of the ethnic tolerance, a method was used called "the tolerance index" [20] and "The types of the ethnic identity" [2].

To study the level of self-monitoring, a test questionnaire was used "The scale of self-monitoring" developed by Snyder [21].

The data were studied using the programs MS Excell and a package for the statistical data processing SPSS'13. To study the data, there were used the following statistical methods: the descriptive statistics, Kolmogorov-Smirnov test, the criterion of Shapiro-Wilks, the comparison of asymmetry and excess with their standard errors, the three-factor ANOVA with repeated measures, the two-factor ANOVA with repeated measures, multiple comparisons proposed by the Mann-Whitney test, the Pearson's Chi-square test, the Spearman's correlation coefficient, the criterion of Fisher transformation.

IV. ANALYSES AND RESULTS

Using the Mann-Whitney U test, statistically significant differences are noticed in the measurements of tolerance in the groups of the Russians and the Latvians. The data obtained by the descriptive statistics are illustrated in Figure 1. The level of tolerance (IT) of the respondents of the group "The Russians" is higher than the level of the respondents of the group "The Latvians" ($U = 1299.5$; $p = 0.000 \leq 0.001$), the level of the ethnic tolerance (ET) of the respondents of the group "The Russians" is higher than the level of the respondents of the group "The Latvians" ($U = 1195.5$; $p = 0.000 \leq 0.001$), the tolerance level as personality traits (PT) of the respondents of the group "The Russian" is of a higher level than of the respondents from the group "The Latvians" ($U = 1294.5$; $p = 0.000 \leq 0.001$).

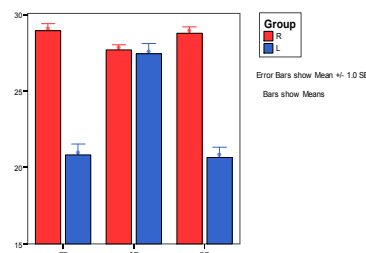


Fig. 1 the diagrams for the mean values of tolerance. ET –the ethnic tolerance, ST –the social tolerance, PT - tolerance as a personal trait

A study of the measurements results of the ethnic identity showed no statistically significant differences between the groups. There is only found one significant difference: the level of the ethno-fanaticism of the respondents from the group "The Latvians" is of a higher level than that of the respondents from the group "The Russians" ($p = 0.014 \leq 0.05$).

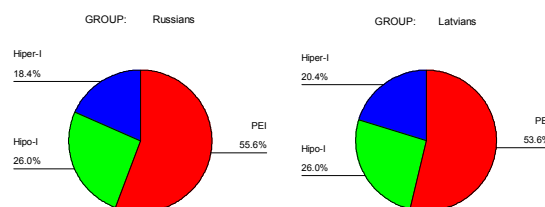


Fig. 2 The distribution of points according to the scales of transformation of the ethnic consciousness: PIE-a positive ethnic identity, Hypo-I - hypo-identity, Hyper-I – hyper-identity

The distribution of levels of self-monitoring in both groups showed the representatives of the Latvian ethnoses, the level of control over expressive reactions is higher than that of the Russians as shown in Figure 2. In particular, the percentage of the Latvian respondents with a high self-monitoring, by 14.84% is over the same option in the Russian group, the average level of self-monitoring is more pronounced in the Russian group and on 15% is higher than the number of the Latvian respondents with an average level of self-monitoring and the number of the respondents with a weak level self-monitoring in both groups did not differ (Figure 3).

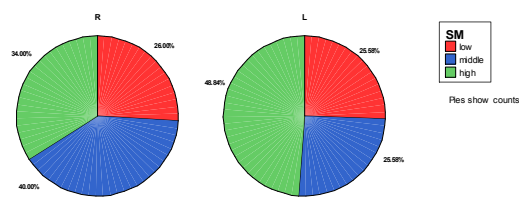


Fig. 3 Diagrams of the mean values for self-monitoring

In the correlation analysis, the correlation coefficients by Spearman were calculated. As a result, a statistically significant link in a group of the representatives of the Latvian ethnos against the Latvians - a negative monotonic relationship between the implicit attitudes and tolerance ($r_s = -0.325$; $p = 0.034 \leq 0.05$; $N = 43$ and $r_s = -0.320$; $p = 0.036 \leq 0.05$; $N = 43$), indicating a decrease in the level of tolerance to the deterioration of the implicit attitude.

In the group of the representatives of the Russian ethnos against the representatives of the Latvian ethnos, the following correlation dependencies are found: a positive monotonic relationship shifts of the reaction time (of the implicit relationship) with a positive ethnic identity ($r_s = 0.219$, $p = 0.029 \leq 0.05$, $N = 100$ and $r_s = 0.229$, $p = 0.022 \leq 0.05$, $N = 100$), that is, growth of the positive ethnic identity by the deterioration of the implicit attitude. Also, there is observed a negative monotonic relationship of the implicit relationship (R – an absolute shift of the reaction time, R_n – a normalized shift of the reaction time) with the ethnic indifference ($r_s = -0.199$, $p = 0.047 \leq 0.05$, $N = 100$) which means a consistent deterioration of the attitude of the representatives of the Russian ethnos in relation to the representatives of the Latvian ethnos and the reduction of the ethnic indifference. There is found a negative monotonic relationship of shifts of the reaction time (absolute and normalized) with the hyper-identity ($r_s = -0.201$, $p = 0.045 \leq 0.05$, $N = 100$ and $r_s = -0.200$, $p = 0.046 \leq 0.05$, $N = 100$), indicating a consistent increase of indicators of the shifts in the reaction time - deteriorating relationship between the Russians and the Latvians - and the decrease in hypo-identity.

The results of the use of the multi-functional statistical criterion "The angle transformation of Fisher" showed the following results. In the group of "The Russians" to "The Russians", the rate of "The Russians" with a positive implicit attitude toward "The Russians" was significantly higher than that of "The Russians" with a negative attitude to "The Russians" ($p \leq 0.05$). The rate of "The Russians" with a negative implicit attitude toward "The Latvians" is significantly higher than that of "The Russian" with a positive attitude to "The Latvians" ($p \leq 0.01$).

In the group "The Latvians" to "The Latvians", the statistical significance was not detected but the rate of "The Latvians" with a positive implicit attitude toward "The Latvians" is slightly higher than that of "The Latvians" with a negative attitude to "The Latvians". The rate of "The Latvians" with a negative implicit attitude toward the "The Russians" is significantly higher than that of "The Latvians" with a positive attitude to the "The Russians" ($p \leq 0.05$).

V. CONCLUSIONS

The results of the explicit and implicit measurements of the indicators related to the ethnic tolerance showed differences. The differences in the explicit and implicit measurements are natural since both types of measurement are studying different aspects of one phenomenon – the ethnic tolerance [22], [23], [24]. Based on the pre-conditions of the association model, the correlation of the implicit and explicit dimensions, attitudes, measured by the indirect methods, are understood as the knowledge of people, formed on the basis of socio-cultural

sources and their origin is not the content of individual experience, but a part of the socialization process [25], [26]. If we consider the results of a study from the standpoint of this model, in the process of socialization among the members of both ethnic groups there could form a negative attitude toward the nearby representative of the ethnic group. Many studies point to the tension between the neighboring ethnic groups [7], [8], [9], [23]. However, measurements obtained by the methods of self-reports, indicate a stable situation as for the most part it reflects the norm of a tolerant attitude.

Most of the measurements of the implicit attitude did not reflect the modality of the implicit attitude, showing neutrality as well as the most explicit measurement methods. It also points to the need for further in-depth study of the phenomenon of the ethnic tolerance and other components of the ethnic attitude. For example, in terms of meta-cognitive model, the correlation of the implicit and explicit constructs assumes the existence of two attitudes in the memory-previous learned and the newfound attitude [13]. If the previously generated attitudes do not match the newfound attitudes, they will be labeled as "false" or "wrong." However, at the initial stage of forming an associative relationship with this label, it is sufficiently weak, at least, so the impact of the attitude on old decisions and behavior will depend on whether a carrier of the attitude has a conscious access to the attitude. Separately, it is worth mentioning the suggestion that the new and the outdated attitudes can be activated automatically and simultaneously, resulting in a neutral, unexpressed reaction. By this mechanism, there can be explained the neutral implicit attitudes revealed in our study.

The correlation of the implicit and explicit components, their interaction are of a particular interest as they allow a deeper understanding of the nature of the ethnic attitude. Increasingly important is to study not declared relations of the respondents in such ethnic complexities of the research as the study of ethnically complicated attitudes. Deployment mechanisms of the effect of the social desirability is also poorly understood in the framework of the knowledge. It is possible to consider enhancing of this mechanism within automatic reactions when the mind makes a decision on the social admissibility of the true attitude. The research of changes of the implicit attitude is also a theme for a further research and development.

As for the content of the explicit and implicit attitudes of Latvia's residents, in our opinion, fixed in the course of the experiment, negatively stained implicit attitudes of both groups in relation to each other require a separate discussion. Another, of course, worthy of attention result is identification of the ethno-nihilistic trends in the Russian ethnic group.

This study opens up wide opportunities for further study of the ethnic attitudes, using the implicit measure. All the probabilities found in the course of the discussion, also need a closer look within the framework of other experiments and empirical studies.

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[26] Karpinski A. Hilton J. L. *Attitudes and the Implicit Association Test*. In a Journal of Personality and Social Psychology, Vol 81(5), Nov 2001, 774-788.

REFERENCES

- [1] Янчук В.А. *Введение в современную социальную психологию*. Минск: АСАР, 2005, pp 768.
- [2] Солдатова, Г.У., & Шайгерова, Л.А. *Психодиагностика толерантности личности*. М: Смысл, 2008, pp. 172.
- [3] Robinson, J., Witenberg, R., & Sanson, A. *The socialization of tolerance*. In the M. Augoustinos & K. J. Reynolds (Eds.), *Understanding prejudice, racism and social conflict* London: Sage, 2001, pp. 73-88.
- [4] Барднер Г.Л. *Социальная психология толерантности*. Изд. Санкт-Петербургского университета, 2005, pp. 120.
- [5] Бондырева, С.К., & Колесов, Д.В. *Толерантность. Введение в проблему*. М: изд. Московского психолого-социального института, 2003, pp. 240.
- [6] Гречко П.К. *Различия: от терпимости к культуре толерантности*. М: Изд. Росийского университета дружбы народов, 2006, pp. 415.
- [7] Osis, J., & Ose L., *Pētījums balsītas stratēģijas tolerances veicināšanai*. Tolerance: individuālā un sociāla dimensija. Rīga: Dialogi.lv, 2006.
- [8] Apine, I., & Volkovs, V. *Slāvi Latvijā*. Rīga: IU "Mācību apgāds", 1998.
- [9] Dribins, Leo *Etniskās un nacionālās minoritātes Eiropā: vēsture un mūsdienas*. Rīga: Eiropas Padomes Informācijas birojs, 2004.
- [10] Ризрдон, Б. Э. *Толерантность – дорога к миру*, СПб.: Бонфи, 2001. pp. 304.
- [11] Перцев А.В. *Ментальная толерантность*. Вестник Уральского межрегионального ин-та обществ наук 2002 №1 с.53
- [12] Шкуратова, И. П. *Когнитивная сложность как основа толерантного мышления*. Век толерантности : научно-публицистический вестник. 2003. № 5. pp. 44-51.
- [13] Petty, R. E., & Brinol, P., DeMarree K. G. *Self-certainty: Parallels to attitude certainty*. In the International Journal of Psychology and Psychological Therapy, 7, 2007, pp. 159-188.
- [14] Rudman L.A. *Implicit Measures for Social and Personality Psychology*. SAGE Publications, 2011, pp. 96.
- [15] Rudman, L. A., Phelan, J. E., & Heppen, J. *Developmental sources of implicit attitudes*. In Personality and Social Psychology Bulletin, 2007, 33(12), pp. 1700-1713.
- [16] Gawronski, B., Payne B.K. *Handbook of implicit social cognition. Measurement, theory, and applications*. The Guilford Press: New York, London, 2010, pp. 594.
- [17] Tajfel H., Turner J.C. *The social identity theory of intergroup behavior* Psychology of intergroup relations. Chicago, 1986, pp. 7-24.
- [18] Berry J.W., Poortinga Y.H., Segall M.H., Dasen P.R. *Cross-cultural psychology: Research and applications*. Cambridge, 1992.
- [19] Лебедева Н.М. *Теоретико-методологические основы исследования этнической идентичности и толерантности в поликультурных регионах России и СНГ*. In the Идентичность и толерантность. Под ред. Н.М. Лебедевой. М., 2002;
- [20] Солдатова Г.У., Шайгерова Л.А., Прокофьева Т.Ю., Кравцова О.А. *Практикум по психодиагностике и исследованию толерантности личности*. М., 2003.
- [21] Snyder, M. *Self-monitoring of expressive behavior*. In a Journal of Personality and Social Psychology, 1974, 30(4), 526-537.
- [22] Wilson, T. D., Lindsey, S. & Schooler, T. Y. *A model of dual attitudes*. In the Psychological Review, 2000, 107, 101-126 pp.
- [23] Plotka I., Igonin D., Blumenau, N., Bambulaka, M., & Ozola, E. *Modern technologies in a social and psychological research: implicit methods of studying the ethnic attitudes*. In a Professional Studies: Theory and Practice, 6. – 2010. – 166-174 pp.
- [24] Шляхтин, Г., & Давыдов, С. *Соотношение имплицитных и эксплицитных этнических стереотипов у русских и немцев*. Нижний Новгород: ННГУ, 2006.
- [25] Fazio, R. H., & Olson, M. A. *Implicit measures in social cognition research: Their meaning and uses*. In a Annual Review of Psychology, 54, 2003. pp. 297-327.