

PSYCHOLOGICAL DETERMINANTS OF TOLERANCE AND SOCIAL ADAPTATION PROCESSES IN STUDENTS WITHIN AN INCLUSIVE EDUCATIONAL ENVIRONMENT

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Abstract

This article investigates the current challenges of organizing inclusive education in the higher education system, focusing on the formation of a tolerant environment within the student community and the socio-psychological adaptation processes of students with special needs. The article analyzes the key psychological determinants (factors) that define the adaptability of individuals in an inclusive environment. The study explored the correlation between students' empathy, emotional intelligence, and indicators of the socio-psychological climate within the group. In conclusion, the article presents practical psychological recommendations and corrective programs aimed at increasing the level of inclusive tolerance and accelerating the social adaptation of students in higher education institutions.

Keywords

inclusive education, tolerance, social adaptation, psychological determinant, empathy, higher education, students, personality traits, social adjustment.

INTRODUCTION: At the current stage of development, the transformation of the higher education system, ensuring equal rights to education for every citizen, and establishing the principles of social equality in society have become priority areas of state policy. Specifically, Decree No. PQ-4860 of the President of the Republic of Uzbekistan, dated October 13, 2020, "On Measures to Further Improve the System of Education and Upbringing for Children with Special Educational Needs," and the "Concept for the Development of Inclusive Education in the Republic of Uzbekistan" serve as a solid legal and conceptual basis for creating an inclusive environment in higher education institutions and providing comprehensive support to students with special needs. These legal documents task educators and psychologists with not only developing the physical infrastructure in educational institutions (ramps, special equipment) but, most importantly,

fostering a healthy psychological environment and cultivating relationships of mutual respect and tolerance within the student community.[1]

The relevance of this topic is underscored by the fact that while the principles of inclusive education are rapidly being integrated into higher education institutions, social and psychological barriers toward peers with special needs still exist within the student body. The university years are a critical and pivotal period for an individual's social identification and professional formation. In such an environment, the insufficient development of inclusive tolerance skills among non-disabled students or the difficulties in socio-psychological adaptation (adjustment) faced by students in inclusive education programs negatively impact the quality of education and personal growth. Therefore, a need arises for a scientific study of the internal and external factors that govern these processes.

The aim of the research is to identify the key psychological determinants that facilitate the formation of tolerance among students and the social adaptation of students with special needs within the context of inclusive education in higher education institutions, and to develop practical and methodological recommendations for their enhancement.

The scientific and practical significance of this topic lies in its classification of inclusive education not merely as a form of instruction, but as a profound socio-psychological phenomenon. The determinants that shape the adaptability and tolerance of individuals – such as internal psychological traits (empathy, emotional intelligence, reflexivity) and external environmental factors (group psychological climate, pedagogical communication style) – are analyzed holistically. This research contributes to fostering an inclusive culture in the higher education environment, preventing instances of discrimination, and designing a safe and emotionally supportive educational space for every student.

METHODS: The issue of tolerance and socio-psychological adaptation among subjects of inclusive education is currently one of the most prominent intersections of modern psychology and pedagogy. An inclusive environment is not merely physical integration, but a dynamic system requiring profound cognitive, emotional, and behavioral changes. A number of fundamental scientific studies have been conducted at international and local levels to identify and evaluate the psychological determinants that drive this process.

Western scholars, particularly T. Booth and M. Ainscow, who are considered the founders of the inclusive culture paradigm, link tolerance indicators in educational institutions not only to external pedagogical influences but also to the internal system of socio-cultural values within the student community [2]. According to their conclusions, the social adaptation of individuals with special

needs proceeds with minimal psychological resistance only when social relations within the group are based on the idea of "accepting everyone" (inclusion).

A. Asmolov, who studied the problem of tolerance from the perspective of an individual's cognitive orientation, defines personal tolerance as "the stability of a person and their psychological immunity against alienation in extreme conditions, in the face of stress and various contradictions" [3]. In the context of inclusive education, this immunity is formed based on the subjective empathy of students without disabilities. Meanwhile, psychologist V. Boyko emphasized the significant role of emotional determinants in the formation of tolerance and experimentally substantiated that the level of communicative tolerance directly correlates with an individual's emotional intelligence indicators [4].

Russian researcher N. Nazarova studied the psychological barriers (stigma, stereotypes, and social fears) that students encounter during the transition from special education to inclusive education [5]. In her opinion, the negative social stereotypes formed in the minds of students without disabilities toward their peers with special needs are the primary maladaptive factor that slows the adaptation process.

Uzbekistani scholars are also actively researching the pedagogical and psychological problems of inclusive education, taking into account the specific characteristics of the national education system. In her scientific works, Professor F. Qodirova centers on the problem of developing the professional and psychological competencies of educators in an inclusive educational environment [6]. She has proven that the inclusive preparation of a higher education instructor is an external psychological determinant that stimulates a tolerant atmosphere within the student community.

Furthermore, research by scholars such as L. Mo'minova and U. Fayziyeva, who have established a systemic school of thought in the field of inclusive and special education in our republic, has shown that the social adaptation of learners with special needs is inextricably linked to their individual psychological characteristics, particularly their level of self-esteem and locus of control [7]. The conclusions of local scholars indicate that although qualities of broad-mindedness and empathy, characteristic of the Eastern mentality, accelerate the formation of tolerance within the student community, cognitive dissonance (internal conflict) still arises in students during the initial stages of integration without a scientifically-grounded psychological support system.

In conclusion, the literature review indicates the necessity of developing a model of systemic determinants that ensures tolerance and adaptation in the context of inclusive education. This model should encompass the integration of

internal personality traits (empathy, EQ) and the microenvironment (group climate).

Stemming from the research objective, a comprehensive methodological approach was designed for the empirical study of the psychological determinants that define students' level of tolerance and their socio-psychological adaptation processes in an inclusive education setting. The research was organized at the Nukus State Pedagogical Institute named after Ajiniyaz.

A total of 120 undergraduate students studying in inclusive and regular groups participated in the experimental study. Of these, 68 were female and 52 were male. The average age of the participants was 19.4 years. The sample also included 15 students with physical disabilities (musculoskeletal system disorders and visual impairments), whose social adaptation was studied as a separate subgroup.

The study utilized a block of four interconnected primary methodologies:

1. V.V. Boyko's "Determining the Level of Communicative Tolerance" methodology: This test was used to assess the indicators of how well students without disabilities could accept the unique characteristics (psychophysical state, pace of communication, emotional reactions) of their peers with special needs, and their ability to refrain from imposing strict demands on them or discriminating against them.

2. The "Diagnosis of Socio-Psychological Adaptation" questionnaire, authored by C. Rogers and R. Dymond: This methodology served to determine the level of adaptation of students with special needs to the higher education environment across the following subscales: "Adaptation / Maladaptation," "Acceptance of Others / Rejection of Others," "Emotional Comfort / Emotional Discomfort," and "Locus of Control (Internal/External)" [8].

3. I.M. Yusupov's "Assessment of Empathic Tendencies" test: This methodology was employed to measure students' capacity for empathy – the ability to feel and understand the emotional state of others – which is considered the most crucial personal determinant of tolerance [9].

4. L.N. Lutoshkin's "Assessment Card for the Socio-Psychological Climate in a Group": The microclimate within the group and the atmosphere of friendly cooperation among students were evaluated as an external determinant [10].

To ensure the reliability and statistical significance of the obtained empirical data, methods of mathematical-statistical analysis were used. All indicators were processed using the SPSS 26.0 (Statistical Package for the Social Sciences) computer software package. Pearson's correlation coefficient (r) was calculated to reveal linear relationships between variables. The reliability of the difference in indicators

between the two groups was statistically evaluated using Student's t-test. The levels of statistical significance were accepted at $p < 0.05$ and $p < 0.01$.

RESULTS: A mathematical-statistical analysis of empirical data from the study revealed a close and profoundly systematic correlation between the tolerance level of students in an inclusive higher education environment and the socio-psychological adaptation of youth with special needs. The analysis, conducted using Pearson's correlation coefficient, established that higher empathy indicators in students without disabilities have a direct positive correlation with an increase in their communicative tolerance ($r = 0.46$, $p < 0.01$). This scientific fact demonstrates that a high personal empathy determinant in students creates the foundation for them to accept the psychophysical abilities, unique communication pace, and behavioral reactions of their peers with special needs with tolerance, without discrimination or frustration. Concurrently, the socio-psychological adaptation indicators of students with special needs, measured by the Rogers-Dymond questionnaire, showed a strong correlation with the group's general tolerant atmosphere and socio-psychological climate ($r = 0.52$, $p < 0.01$). In other words, the more established the culture of tolerance within the student body and the more favorable the microclimate is rated according to Lutoshkin's methodology, the lower the level of emotional discomfort and personal anxiety among students with physical or sensory impairments. Consequently, their integration into group activities and their scores on the "Acceptance of Others" subscale show a sharp positive change. When the differences between inclusive and traditional groups were compared using Student's t-test, it was found that the tolerance level of students without disabilities who studied together in inclusive groups for one year was statistically significantly higher than that of their peers in traditional groups ($t = 2.84$, $p < 0.05$). This finding suggests that the process of inclusive education itself serves as a crucial external macro-determinant that transforms an individual's social consciousness, breaks stereotypes, and fosters practical tolerance. However, the study also observed that for students with special needs who have an external locus of control and low self-esteem, the adaptation process was nevertheless slow and challenging, even within a positive group climate. This indicates that social adaptation is determined not only by the external social environment but also by the individual's subjective psychological characteristics, which act as internal determinants. A discussion of the results shows that a purely technical implementation of inclusive education in higher education institutions is insufficient. The decisive psychological factors for ensuring the success of educational integration are the systematic organization of targeted emotional intelligence (EQ) and empathy development training by department psychologists,

and the enhancement of educators' psychological competence for teaching in inclusive groups.

DISCUSSION: The empirical data obtained during our study fully confirmed that in an inclusive education setting, the tolerance level of students and the socio-psychological adaptation of youth with special needs are interdependent and dynamically developing systemic phenomena. While empathy and emotional intelligence in neurotypical students manifest as personal determinants that define their communicative tolerance, the socio-psychological climate within the group serves as the most critical micro-environmental factor (an external determinant) that accelerates adaptation for students with special needs. The results obtained practically enrich the theoretical views of Western and local scholars – particularly T. Booth, M. Ainscow, and our republic's own F. Qodirova – that socio-psychological integration holds primary importance over mere physical integration within the education system.

The research findings indicate that the tolerance level among students in inclusive groups is significantly higher than in traditional groups. This suggests that cognitive convergence occurs between subjects during daily communication and collaborative learning activities. In the minds of neurotypical students, medical stereotypes and social fears about "disability" (as noted by N. Nazarova) give way to concepts of social partnership and human equality. In other words, the real inclusive environment itself acts as a powerful macro-determinant that humanizes an individual's social consciousness. However, another aspect of the study is noteworthy: students with special needs who, due to their individual characteristics, had an external locus of control and low self-esteem, still exhibited high anxiety and partial maladaptation, even when the psychological environment in the group was favorable. This situation demonstrates that the process of social adaptation depends not only on external conditions but also on a person's internal psychological resources and their confidence in determining their own professional destiny.

The scientific conclusions obtained put forward important conceptual recommendations for higher education practices. To increase the effectiveness of inclusive education, it is not enough to limit efforts to improving the university's material and technical resources (e.g., ramps, touch screens). The most crucial step is to create systematic psychological support platforms for students and teachers within higher education institutions, particularly under the purview of general psychology and pedagogy departments. To foster stable tolerance within the student community, it is necessary to conduct specialized psychological training that develops cognitive and emotional empathy, and to incorporate practical

modules into curricula that shape personal tolerance. Moreover, regularly enhancing the inclusive competence of educators makes it possible to prevent latent conflicts among students and to manage constructive dialogue. Ultimately, the true goal of inclusive education is to create a common educational space where every student can feel like a complete individual, free from discrimination, and psychologically safe.

CONCLUSION: Our scientific-theoretical and empirical research on designing inclusive educational conditions in the higher education system and forming a culture of tolerance among students served as the basis for forming the following important final conclusions. Firstly, inclusive education in higher education institutions is not merely a process of physical and organizational integration, but a complex socio-psychological system that requires a deep transformation of the student's personality at the cognitive, emotional, and behavioral levels. The results of the conducted research firmly demonstrated that in an inclusive environment, the level of students' tolerance and the socio-psychological adaptation of youth with special needs are inextricably linked and mutually stimulating determinants (factors). A healthy psychological climate and an atmosphere of tolerance within the student community serve as the primary external support for adapting students with disabilities to academic and social activities.

Secondly, as a result of empirical analysis, it was established that the highest indicators of empathy, reflexivity, and emotional intelligence among students are the strongest internal personal determinant determining their communicative tolerance. It is precisely a high level of empathy that allows healthy students to correctly perceive the physical and sensory characteristics of their peers based on humanism, without any stigmas or stereotypes. At the same time, it was proven that students who studied together in inclusive groups for more than a year have a statistically significantly higher level of tolerance compared to their peers in traditional groups. This situation indicates that the inclusive educational environment itself is a powerful macro-determinant that shapes students' humanistic values, reduces social distancing in society, and sharpens practical tolerance skills. However, adaptation depends not only on the external environment but also on the personal resources of students with special needs, specifically internality (internal locus control) and a positive "Self-concept," which are also decisive factors ensuring successful adaptation.

As a practical result of the research, a number of recommendations are put forward aimed at further improving the higher education system and the pedagogical environment of our institute. To develop an inclusive culture in higher education, it is not enough to create only material infrastructure; it is necessary to

introduce systematic psychological support and consultation centers for students and teachers at the departments of general psychology and pedagogy. To stabilize tolerance within the student community, it is necessary to regularly conduct correctional and developmental training programs that enhance emotional intelligence, and to regularly develop the psychological competence of faculty members in conducting classes in inclusive groups and constructively resolving potential hidden conflicts. After all, these measures serve to create an equal and safe educational space where every student, regardless of their social background and physical capabilities, can manifest themselves as a full-fledged individual.

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