

G.Z. Tokashova^{1*}, **S.K. Abildina²**¹Caspian University of technology and engineering named after Sh.Yessenov, Aktau, Kazakhstan²Karaganda University named after A.E. Buketov, Karaganda, Kazakhstan*e-mail: g_tokashova@mail.ru

ADAPTATION OF STUDENTS TO ACADEMIC MOBILITY: PSYCHOLOGICAL AND PEDAGOGICAL MECHANISMS AND PRACTICES

The article addresses the problem of students' adaptation to academic mobility in the context of the internationalization of higher education. The relevance of the study is determined by the growing scale of international mobility and the need to ensure not only access to educational programs but also effective adaptation of students to a new academic and socio-cultural environment. The aim of the research is to identify and substantiate psychological and pedagogical mechanisms of student adaptation, as well as to develop and test effective support practices within the university environment.

The methodological framework is based on a mixed-methods approach combining quantitative and qualitative research methods. The empirical base includes a sample of 128 students from the Caspian University of Technology and Engineering named after Sh. Yessenov and Karaganda University named after Academician E.A. Buketov. The diagnostic tools included the socio-psychological adaptation methodology by C. Rogers and R. Dymond, as well as surveys, interviews, and content analysis.

The results of the initial diagnostics revealed that the level of student adaptation is characterized by a relative predominance of the academic component, with insufficient development of socio-cultural and psychological adaptation. In response to the identified gaps, a model of psychological and pedagogical support was developed, including three key components: academic advising, intercultural support, and the development of self-regulation and autonomy skills.

The implementation of the model demonstrated its effectiveness: the overall adaptation index increased from 3.58 to 4.12, the proportion of students with a high level of adaptation increased, and the percentage of students with a low level decreased. The most significant improvements were observed in emotional comfort, adaptability, and internal locus of control, indicating the formation of устойчивых adaptive strategies.

The findings confirm that successful student adaptation to academic mobility requires a comprehensive system of psychological and pedagogical support. The practical significance of the study lies in the development of a model and a set of effective practices that can be implemented in university settings to enhance the quality of academic mobility and ensure students' sustainable integration into the international educational environment.

Keywords: academic mobility, adaptation, psychological and pedagogical mechanisms, intercultural competence, internationalization, student support.

Г.З. Тоқашова^{1*}, С.К. Әбілдина²¹Ш. Есенов атындағы Каспий технология және инжиниринг университеті, Ақтау, Қазақстан²А.Е. Бөкетов атындағы Қарағанды университеті, Қарағанды, Қазақстан* e-mail: g_tokashova@mail.ru

Студенттердің академиялық ұтқырлыққа бейімделуі: психологиялық-педагогикалық механизмдер мен практикалар

Мақалада жоғары білім беруді интернационалдандыру жағдайында студенттердің академиялық мобильдікке бейімделу мәселесі қарастырылады. Зерттеудің өзектілігі халықаралық мобильдіктің артуымен және студенттердің жаңа академиялық және әлеуметтік-мәдени ортаға тиімді бейімделуін қамтамасыз ету қажеттілігімен айқындалады. Зерттеудің мақсаты – студенттердің бейімделуінің психологиялық-педагогикалық механизмдерін анықтау және оларды университеттік ортада қолдаудың тиімді практикаларын әзірлеу және апробациялау.

Зерттеу әдіснамасы аралас тәсілге (mixed-methods) негізделген және сандық әрі сапалық әдістерді қамтиды. Эмпирикалық база ретінде Ш. Есенов атындағы Каспий технологиялар және инжиниринг университеті мен Е.А. Бөкетов атындағы Қарағанды университетінің 128 студенті алынды. Диагностикалық құрал ретінде К. Роджерс пен Р. Даймондтың әлеуметтік-психологиялық бейімделу әдістемесі, сондай-ақ сауалнама, сұхбат және контент-талдау қолданылды.

Алғашқы диагностика нәтижелері студенттердің бейімделу деңгейінде академиялық компоненттің салыстырмалы түрде жоғары екенін, ал әлеуметтік-мәдени және психологиялық бейімделудің жеткіліксіз дамығанын көрсетті. Осы анықталған мәселелер негізінде психологиялық-педагогикалық қолдау моделі әзірленді, оған үш негізгі компонент енгізілді: академиялық кеңес беру, мәдениетаралық сүйемелдеу және дербестік дағдыларын дамыту.

Модельді апробациялау оның тиімділігін көрсетті: бейімделудің интегралды көрсеткіші 3,58-ден 4,12-ге дейін өсті, жоғары деңгейдегі студенттердің үлесі артты, ал төмен деңгейдегілердің үлесі азайды. Ең маңызды өзгерістер эмоционалды жайлылық, бейімделгіштік және ішкі бақылау көрсеткіштері бойынша байқалды, бұл тұрақты бейімделу стратегияларының қалыптасқанын дәлелдейді.

Зерттеу нәтижелері студенттердің академиялық мобильдікке тиімді бейімделуі кешенді психологиялық-педагогикалық қолдау жүйесін қажет ететінін растайды. Зерттеудің практикалық маңыздылығы университеттерде академиялық мобильдіктің сапасын арттыру және студенттердің халықаралық білім беру кеңістігіне табысты кірігуін қамтамасыз ету үшін қолдануға болатын тиімді модель мен практикалар жүйесін әзірлеуде көрінеді.

Түйін сөздер: академиялық ұтқырлық, бейімделуі, психологиялық қолдау, психологиялық-педагогикалық механизмдер, мәдениетаралық құзыреттілік, интернационалдандыру, студенттерді қолдау.

Г.З. Токашова^{1*}, С.К. Абильдина²

¹Каспийский университет технологий и инжиниринга им. Ш. Есенова, Актау, Казахстан

²Карагандинский университет им. А.Е. Букетова, Караганда, Казахстан

*e-mail: g_tokashova@mail.ru

Адаптация студентов к академической мобильности: психолого-педагогические механизмы и практики

В статье рассматривается проблема адаптации студентов к академической мобильности в условиях интернационализации высшего образования. Актуальность исследования обусловлена ростом масштабов международной мобильности и необходимостью обеспечения не только доступа к образовательным программам, но и эффективной адаптации обучающихся в новой академической и социокультурной среде. Цель исследования – выявление и обоснование психолого-педагогических механизмов адаптации студентов, а также разработка и апробация эффективных практик их сопровождения в университетской среде.

Методологическую основу составил смешанный подход (mixed-methods), включающий количественные и качественные методы исследования. Эмпирическая база представлена выборкой из 128 студентов Каспийского университета технологий и инжиниринга имени Ш. Есенова и Карагандинского университета имени Е.А. Букетова. В качестве диагностического инструментария использована методика социально-психологической адаптации К. Роджерса и Р. Даймонда, а также анкетирование, интервью и контент-анализ.

Результаты первичной диагностики показали, что уровень адаптации студентов характеризуется относительным преобладанием академического компонента при недостаточной выраженности социокультурной и психологической адаптации. В ответ на выявленные дефициты была разработана модель психолого-педагогической поддержки, включающая три ключевых блока: академическое консультирование, межкультурное сопровождение и развитие навыков самостоятельности. Апробация модели продемонстрировала ее эффективность: интегральный показатель адаптации повысился с 3,58 до 4,12 балла, увеличилась доля студентов с высоким уровнем адаптации и снизился процент студентов с низким уровнем. Наиболее значимые изменения зафиксированы в показателях эмоционального комфорта, адаптивности и интернальности, что свидетельствует о формировании устойчивых адаптационных стратегий.

Полученные результаты подтверждают, что успешная адаптация студентов к академической мобильности требует системного психолого-педагогического сопровождения. Практическая значимость исследования заключается в разработке модели и комплекса эффективных практик, которые могут быть внедрены в деятельность университетов для повышения качества академической мобильности и обеспечения устойчивой интеграции студентов в международное образовательное пространство.

Ключевые слова: академическая мобильность, адаптация студентов, психологическая поддержка, психолого-педагогическое сопровождение, межкультурная компетентность, высшее образование, интернационализация, поддержка студентов.

Introduction

In the context of accelerating internationalization of higher education, academic mobility is no longer viewed solely as a form of short-term exchange and is increasingly understood as an important mechanism for the formation of human capital, intercultural competence, academic sustainability and global competitiveness of universities. According to UNESCO, by 2025 the number of students in higher education will reach 264 million, which will increase the scale of cross-border academic mobility. At the same time, the international agenda is shifting from quantitative growth to issues of recognition of qualifications, equal access and ensuring high-quality adaptation of students, which is confirmed by the entry into force of the UNESCO Global Convention (UNESCO, 2023). Current trends in academic mobility are characterized by uneven socioeconomic backgrounds (two-thirds of mobile students in OECD countries come from high-income countries), a concentration of flows in a limited number of countries, and the growing importance of STEM and doctoral programs, reflecting global competition for talent; at the same time, the choice of a country of study is increasingly determined not only by academic reputation, but also by cost, language, cultural proximity and career prospects. The key issue is shifting from expanding mobility to ensuring its inclusiveness, psychological safety and effectiveness, since, according to the Bologna Process (2024), it is the lack of systemic psychological and pedagogical support, academic counseling and adaptation conditions that limits the success and sustainability of students' educational outcomes (OECD, 2025).

For the Republic of Kazakhstan, this issue is of particular relevance, since academic mobility is integrated into a broader course of internationalization and strengthening the global competitiveness of higher education. In the 2024 methodological recommendations of the Ministry of Science and Higher Education of the Republic of Kazakhstan, the promotion of academic mobility is explicitly named as one of the objectives of strategic partnerships with foreign universities, along with the development of joint programs, attracting foreign faculty, and increasing the national and global competitiveness of Kazakhstani higher and postgraduate education organizations (MES of the Republic of Kazakhstan, 2018). The relevance of the topic is also enhanced by the current quantitative changes in the higher education system of Kazakhstan. According

to the Concept for the Development of Higher Education and Science in the Republic of Kazakhstan for 2023–2029, at the beginning of the 2025/2026 academic year, 678.1 thousand students were studying at the country's universities, compared to 624.5 thousand at the beginning of 2024/2025. At the same time, Kazakhstan is consistently increasing its international presence: according to official data, more than 31,000 foreign students are studying in the country, and the development of Kazakhstan as an international educational hub is included among the priority areas of state policy in 2026. Consequently, the expansion of academic mobility in the Republic is no longer just a foreign policy or image project, but is becoming a systemic task of university management, affecting the adaptation, support and retention of students in the educational environment (MES of the Republic of Kazakhstan, 2023).

As we can see, both in the global and Kazakhstani contexts, a common research problem is being identified: the expansion of the scale of academic mobility is outpacing the development of systemic psychological and pedagogical support for students during the adaptation period. Globally, this manifests itself in unequal access to mobility, the dependence of success on socio-economic resources, and the need to institutionalize counseling, support, and inclusion measures. In Kazakhstan, the problem is particularly acute due to the rapid growth of internationalization, the increase in student numbers, the strengthening of the role of strategic partnerships, and the country's desire to become an educational hub in Central Asia, while adaptation practices often remain fragmented, predominantly administrative, and insufficiently conceptualized in psychological and pedagogical terms. The basis for this study was precisely this contradiction between the institutionally declared importance of academic mobility and the insufficient study of those psychological and pedagogical mechanisms that ensure the successful adaptation of students in new academic, cultural and communicative conditions.

Literature review

One of the key areas of scientific discourse is the study of student adaptation in the context of academic mobility as a multi-level process that includes academic, socio-cultural and psychological components. In the works of foreign researchers J. Ward, A. Furnham, Y. Bochner, adaptation is considered through the prism of the theory of cultural shock, acculturation and intercultural competence, where the

success of integration is determined not only by the individual resources of the student, but also by the degree of support from the host educational environment (Ward C., Bochner S., Furnham A., 2001) The Tinto model emphasizes the importance of academic and social integration as factors in student retention and success, while contemporary research focuses on the role of institutional support mechanisms -academic advising, mentoring, peer-support practices, and orientation programs. A number of empirical studies have shown that the presence of structured support reduces anxiety levels, accelerates adaptation, and has a positive effect on academic performance and satisfaction with learning.

At the same time, in recent years there has been increasing interest in psychological and pedagogical mechanisms for supporting academic mobility in the context of digitalization of education and the growth of hybrid forms of education. Research by Teichler, De Wit, Leask, and others shows that academic mobility is being transformed, including virtual and blended formats, which requires rethinking traditional adaptation models and expanding support tools through digital services, online counseling, and personalized educational trajectories (Teichler, 2017; De Wit et al, 2020; Leask, 2015). In the Kazakh scientific field, this issue is presented fragmentarily and mainly in the context of the internationalization of education and academic exchanges (Kosherbaeva, Isalieva et al., 2020; Nurligenova, Sagatova, 2019), while the psychological and pedagogical aspects of support, including the diagnosis of adaptation difficulties, the development of support models and the assessment of their effectiveness, have not been sufficiently developed. This indicates the existence of a research gap caused by the need for a comprehensive analysis of the mechanisms of student adaptation in the context of academic mobility, taking into account the national and institutional context.

Materials and methods

The purpose of the study: to identify and substantiate the psychological and pedagogical mechanisms of students' adaptation to academic mobility and to determine effective practices for their support in the university environment. Research hypothesis: successful adaptation of students to academic mobility will be more effective provided comprehensive psychological and pedagogical support is implemented, including academic counseling, intercultural support, and the development of independence skills.

The empirical base of the study consisted of 128 students of the 2nd to 4th years (aged 19–23 years) of the Caspian University of Technology and Engineering named after Sh. Yesenov (Aktau) and the Karaganda University named after Academician E.A. Buketov (Karaganda). Of these, 64 students had experience of academic mobility, and 64 students were planning to participate in such programs, which provided the opportunity for comparative analysis. To conduct the experimental study, the method of diagnosing social and psychological adaptation by K. Rogers and R. Diamond was used, since it allows for a quantitative comparison of two groups of students on a number of significant indicators: adaptability, self-acceptance, and acceptance of others, emotional comfort, internal control and the desire for dominance. Precisely these parameters show how ready a student is to integrate into a new educational and socio-cultural environment (Rogers, 2007).

The research methodology is implemented in three consecutive stages, ensuring the integrity and logical completeness of the scientific research.

The first stage (preparatory and diagnostic) included the formulation of the goal, hypothesis and objectives of the study, analysis of scientific literature on the problem of academic mobility and student adaptation, as well as the selection of diagnostic tools. The second stage (design and development) was aimed at developing and testing a model of psychological and pedagogical support for students, including three interrelated blocks: academic counseling, intercultural support and development of independence skills, which corresponds to the proposed research hypothesis. As part of this stage, practical activities were implemented aimed at increasing the level of students' adaptation in the context of academic mobility. The third stage (control and generalization) included conducting repeated diagnostics using the same methodology, a comparative analysis of the obtained results, as well as correction of the developed model. Based on the interpretation of the data, a system of effective psychological and pedagogical practices, methods, and techniques was developed, aimed at preparing students for academic mobility and successful adaptation in a new educational environment.

Results

The theoretical analysis showed that psychological and pedagogical support for academic mobility should be considered as a comprehensive system of

targeted influences that ensure the successful adaptation of students in a new educational and socio-cultural environment. Within the framework of modern scientific approaches (systemic, competency-based and personality-oriented), this support includes interconnected components: academic (mastering the educational process), socio-cultural (integration into

a new cultural environment) and psychological (reducing anxiety, developing resilience and self-regulation). In this case, the key condition for effectiveness is psychological and pedagogical mechanisms that combine academic counseling, intercultural support and the development of independence skills (table 1).

Table 1

Essential characteristics of the concept of “psychological and pedagogical mechanisms” in the context of academic mobility

Approach	The essence of the mechanism	Key elements	Functions	Result
Pedagogical	A set of methods, forms and means of organizing the educational process aimed at the development and adaptation of the student's personality	Training, education, support, educational environment	Educational, developmental, organizational	Successful completion of the educational program and development of competencies
Psychological	Internal processes and states of the individual that ensure adaptation to new conditions of activity and environment	Motivation, self-regulation, emotional stability, adaptability	Regulatory, adaptive, protective	Reduced anxiety, increased resilience and psychological well-being
Psychological and pedagogical (integrative)	The interaction of external pedagogical influences and internal psychological processes, ensuring effective adaptation of the individual	Support, reflection, communication, mentoring	Coordinating, integrative, supporting	Harmonious adaptation, successful integration into the educational and socio-cultural environment
The context of academic mobility	A system of mechanisms that ensure the inclusion of students in a new educational and cultural environment	Academic counseling, intercultural support, development of independence	Adaptive, communicative, developmental	Rapid and sustainable adaptation in a mobile environment

Source / Note: Compiled by the author based on the theoretical analysis of the works of V. Tinto, C. Ward, U. Teichler, I.A. Zimnyaya and A.V. Khutorskoy on the problems of academic, socio-cultural and psychological adaptation of students in the context of internationalization of higher education.

Source / Note: This table was compiled by the authors based on the analysis of materials

The presented table 1 reflects the integrative essence of psychological and pedagogical mechanisms, considered as a result of the interaction of external pedagogical influences and internal psychological processes of the individual, which is confirmed in the works of both foreign and domestic researchers. Thus, in the foreign scientific tradition of V. Tinto, J. Ward, U. Teichler, the emphasis is placed on the relationship between academic and socio-cultural integration, where the effectiveness of adaptation is determined not only by the organization of the educational environment, but also by the psychological readiness of the student for intercultural interaction (Tinto, 2009; Ward, Bochner, Furnham, 2001). Russian scientists I.A.Zimnyaya and A.V.Khutorskoy examine psychological and pedagogical mechanisms through the prism of com-

petency-based and personality-oriented approaches, emphasizing the role of support, reflection, and the development of students' independence (Zimnyaya, 2004; Khutorskoy, 2003). In Kazakhstani scientific discourse, this concept is associated with the processes of internationalization of education and the need to create an adaptive environment for students in the context of academic mobility. Thus, the synthesis of these approaches allows us to consider psychological and pedagogical mechanisms as a multi-component system that ensures the successful adaptation of students and their effective integration into a new educational and socio-cultural environment (Nazarbayev University, 2020; MES of the Republic of Kazakhstan, 2018).

The results of the primary diagnostics (using the method of K. Rogers and R. Diamond) showed the

presence of differentiation in the level of students' socio-psychological adaptation depending on the experience of academic mobility, field of study, university and age. In terms of experience of participation in academic mobility, it was found that students with such experience (N=64) demonstrate higher indicators of adaptability (4.1), self-acceptance (4.0) and emotional comfort (3.9) compared to students without experience (N=64), for whom these indicators were 3.6; 3.5 and 3.4, respectively. This indicates the formation of more developed adaptation strategies, internal control and confidence in an intercultural environment in mobile students.

An analysis by training area revealed that the highest level of adaptation was recorded among students majoring in information technology (4.0) and technical/technological fields (3.9), which may be related to greater digital competence and mental flexibility. Students majoring in the natural sciences and mathematics demonstrated average scores (3.8), while students majoring in pedagogy (3.6) and social sciences and humanities (3.5) had lower levels of adaptation, indicating the need to strengthen

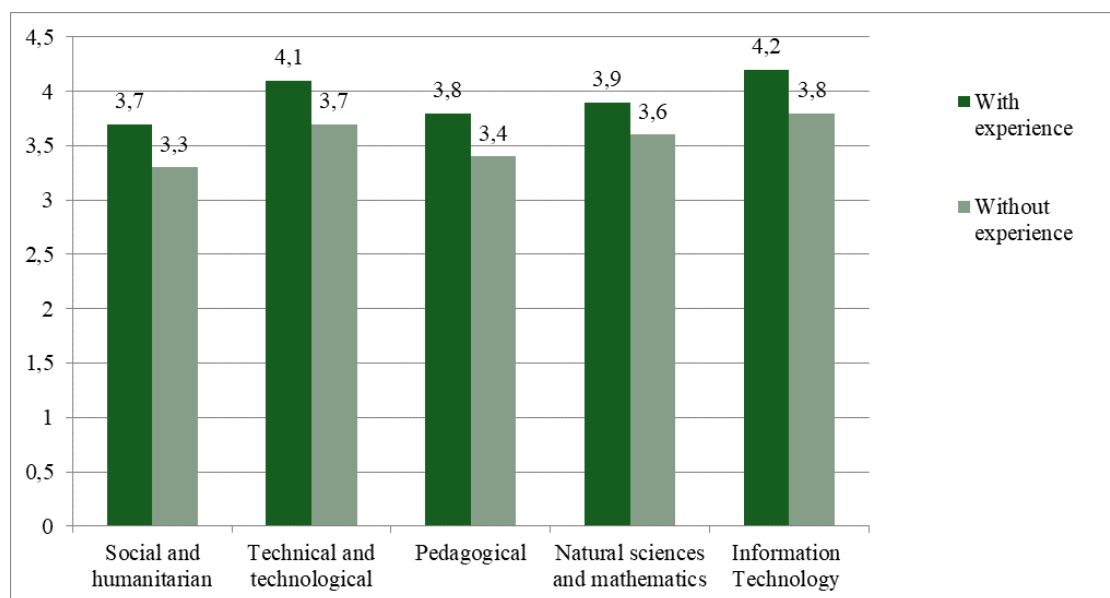
practice-oriented and intercultural components of training.

A comparative analysis across universities revealed that students at E.A. Buketov Karaganda University demonstrate slightly higher adaptation scores (average score of 3.85) compared to students (3.65) at Sh. Yesenov Caspian University of Technology and Engineering, which may be due to differences in the level of support organization and the educational environment. However, these differences are moderate and require further analysis of institutional factors.

An age analysis revealed that third- and fourth-year students aged 21–23 years have a higher adaptation level (3.9) than second-year students (aged 19–20 years)—3.6, which is explained by the accumulation of academic and social experience, as well as a greater readiness for independent work. Overall, the results of the initial assessment indicate that students' adaptation to academic mobility is determined by a combination of factors and requires targeted psychological and pedagogical support (figure 1).

Figure 1

The level of adaptation of students by specialty (with/without experience) primary diagnosis



Source / Note: Compiled by the author based on the results of primary diagnostics of students' socio-psychological adaptation using the methodology of C. Rogers and R. Dymond (N=128), with differentiation by field of study and experience of academic mobility.

Source / Note: This figure was compiled by the authors based on the analysis of materials

The diagram reflects the results of the primary diagnosis of the level of socio-psychological adaptation of students in various areas of training depending on the presence of academic mobility experience. At the initial stage, in all groups, higher indicators are recorded for students with mobility experience, but in general, the level of adaptation is average, which indicates the presence of unrealized adaptation potential. The greatest differences are observed in technical and information science specialties, while in pedagogical and social sciences and humanities the indicators remain lower, especially for students without mobility experience. The obtained data from the initial diagnosis indicate the need for targeted psychological and pedagogical support to level out and improve the level of adaptation of students.

The results of the initial diagnostics revealed a heterogeneous nature of students' adaptation to academic mobility: with fairly high rates of academic

adaptation, lower values of the socio-cultural and psychological components were recorded, especially among students who have no experience of mobility. This made it possible to identify key problem areas requiring targeted pedagogical intervention and substantiated the need to develop a structured model of psychological and pedagogical support reflecting the main mechanisms of activity (Klimov, 2004). Three interrelated blocks were identified as the basic elements of the model – academic counseling, intercultural support and the development of independence skills, since they reflect the main adaptation mechanisms: cognitive (mastering the educational environment), communicative-social (inclusion in intercultural interaction) and personal-regulatory (self-organization and stress resistance). Their integration ensures a comprehensive impact on key aspects of the adaptation process and allows for a transition from fragmented support to systemic support for students in the context of academic mobility (table 2).

Table 2

Contents of the model of psychological and pedagogical mechanisms for supporting students in adapting to academic mobility (second stage of the study)

Block	Content	Activity	Implementation tools	Expected effect
Academic Advising	Supporting students in mastering the educational program, orientation in the requirements and the educational system	Individual consultations, assistance in developing a curriculum, support during the training period	Tutoring, mentoring, academic guides, online consultations	Improving academic performance and reducing learning difficulties
Intercultural support	Developing intercultural communication skills and adapting to a new social environment	Intercultural communication training, adaptation meetings, cultural events	Role-playing games, case studies, group discussions, peer support	Improving social integration, developing intercultural competence
Developing independence skills	Development of the ability for self-regulation, responsibility and independent decision-making	Project activities, reflective assignments, independent work	Cases, portfolios, reflection journals, digital platforms	Increasing autonomy, developing self-management and adaptation skills

Source / Note: Developed by the author within the framework of the research based on the results of primary diagnostics and the conceptual provisions of psychological and pedagogical support of academic mobility.

Source / Note: This table was compiled by the authors based on the analysis of materials

During the period of corrective work on the developed model of psychological and pedagogical support, specific practical techniques were identified and tested, which showed positive results in increasing the level of adaptation of students. The academic counseling unit effectively utilized individual academic sessions with tutors, which helped reduce learning difficulties and enable more informed planning of educational trajectories, as well as navigation seminars, which allowed students to more

quickly navigate the requirements of the educational environment and the university's digital platforms. In the intercultural support block, a significant role was played by intercultural communication trainings aimed at developing interaction skills in a new cultural environment, as well as a peer-support program that ensured faster social integration of students through informal interaction with mentors. In turn, as part of the independence skills development block, reflective adaptation diaries were tested,

which facilitated reflection on personal experience and reduced anxiety, as well as case studies and situational modeling, which enabled students to develop effective strategies for behavior during academic mobility. Overall, the use of these techniques resulted in positive dynamics in key adaptation indicators and confirmed the effectiveness of an integrated ap-

proach to psychological and pedagogical support for students.

The third stage (control and generalization) was aimed at checking the effectiveness of the developed model and included a set of procedures for re-diagnosis, analysis and generalization of the results (table 3, figure 2).

Table 3

Dynamics of indicators of students' socio-psychological adaptation (before and after the experiment)

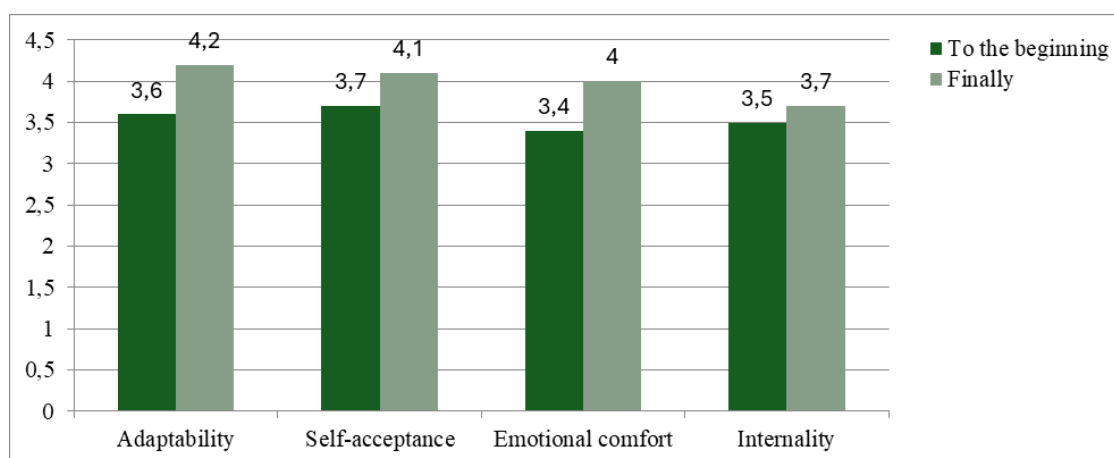
Indicator	KUTiI named after Sh. Yessenova (before)	KUTiI named after Sh. Yessenova (after)	KarU named after E.A. Buketov (before)	KarU named after E.A. Buketov (after)
Adaptability	3,7	4,3	3,5	4,1
Self-acceptance	3,8	4,2	3,6	4,0
Emotional comfort	3,5	4,1	3,3	3,9
Internality	3,6	4,2	3,4	4,0

Source / Note: Compiled by the author based on the results of empirical research using the methodology of socio-psychological adaptation by C. Rogers and R. Dymond (before and after the experiment).

Source / Note: This table was compiled by the authors based on the analysis of materials

Figure 2

Dynamics of students' adaptation to academic mobility (final data)



Source / Note: Compiled by the author based on the results of repeated diagnostics (before/after experiment) using the Rogers–Dymond socio-psychological adaptation method; reflects the dynamics of key indicators (adaptability, self-acceptance, emotional comfort, internality).

Source / Note: This figure was compiled by the authors based on the analysis of materials

A comparative analysis revealed positive dynamics across all key parameters at both universities. The most significant changes were observed in adaptability and emotional comfort (+0.6–0.7), indicating a decrease in anxiety and increased resilience among students. An increase in internality indicates the development of internal control and responsibil-

ity for their own educational trajectory. Moreover, students at the Sh. Yessenov KUTI demonstrated slightly higher final scores, which may indicate the greater effectiveness of the implemented support practices.

Based on the interpretation of quantitative and qualitative data, a correction was made to the model

of psychological and pedagogical adaptation mechanisms, which resulted in the formation of a system of effective psychological and pedagogical practices aimed at preparing students for academic mobility, reducing adaptation risks and ensuring their sustainable integration into a new educational and socio-cultural environment.

The system of psychological and pedagogical practices is presented through three interconnected blocks, each of which fulfills a specific pedagogical function in the process of student adaptation to academic mobility. Thus, the academic block aims to ensure the successful integration of students into the educational process of the host university. Within its framework, such practices as individual consultations, tutoring support, training in working with educational platforms, and clarification of requirements and assessment criteria were implemented. The pedagogical value of this module lies in fostering academic independence, developing skills in planning and organizing one's own educational activities, and reducing academic difficulties. The intercultural module focuses on developing students' communicative and sociocultural competence. It includes intercultural communication training and peer-support programs. From a pedagogical point of view, this unit promotes tolerance, broadens cultural horizons, develops skills for effective interaction in an international environment, and reduces barriers to interpersonal communication. The personal development block (development of independence) is aimed at forming the student's internal readiness for adaptation through the development of self-regulation, responsibility and reflection. This unit utilizes practices such as reflective journaling, case studies, situational modeling, and project work. The pedagogical significance of the block lies in the development of the student's subjective position, the ability to make decisions in conditions of uncertainty and the formation of sustainable adaptation strategies necessary for successful integration into a new educational and socio-cultural environment.

Discussion

The results of the study confirm and specify the provisions of modern theories of academic and socio-cultural adaptation (Tinto, Ward, etc.), demonstrating that the success of students' inclusion in the conditions of academic mobility is determined not only by the level of their initial preparation, but also by the presence of targeted psychological and pedagogical support. The data from the

initial diagnostics showed an imbalance in adaptation components with a predominance of academic adaptation and insufficient expression of sociocultural and psychological indicators, which coincides with the conclusions of foreign studies on the key role of intercultural and emotional factors. At the same time, the results of the formative stage and final assessment indicate that the implementation of a structured model, including academic counseling, intercultural support, and development of independence, leads to a significant increase in all adaptation indicators (by 0.6–0.7 points), particularly in terms of emotional comfort and internality. This suggests that a comprehensive psychological and pedagogical approach is an effective mechanism not only for supporting but also for developing students' adaptive potential, ensuring their sustainable integration into the new educational and sociocultural environment.

Conclusion

The conducted research made it possible to comprehensively reveal the problem of students' adaptation to academic mobility in the context of the internationalization of higher education and to substantiate the importance of psychological and pedagogical mechanisms as a key factor in the successful integration of students into a new educational and socio-cultural environment (European Commission, 2024; Erasmus+, 2024; Bologna Process, 2024). The theoretical analysis showed that adaptation is multi-component and includes academic, socio-cultural and psychological aspects, and their balanced development is possible only with systemic support from the university. The synthesis of foreign, Russian and Kazakh approaches made it possible to consider psychological and pedagogical mechanisms as an integrative system that ensures the interaction of external pedagogical influences and the internal resources of the student's personality.

The results of the empirical study confirmed the proposed hypothesis and revealed a number of significant patterns. It was found that the initial level of student adaptation is characterized by a relative dominance of the academic component, with insufficient emphasis on the sociocultural and psychological aspects, especially among students with no prior academic mobility experience. The identified differences across fields of study, age, and universities demonstrate the multifactorial nature of the adaptation process and the need for differentiated pedagogical support.

The developed and tested model of psychological and pedagogical support, including academic counseling, intercultural support and the development of independence skills, has demonstrated its effectiveness. The implementation of this model resulted in a significant increase in students' socio-psychological adaptation indicators, a reduction in anxiety, increased emotional comfort, and the development of internal responsibility for learning outcomes. Practice-oriented technologies (peer support, intercultural training, case studies, and reflective practices) played a key role, activating students' agency and fostering the development of sustainable adaptation strategies.

The practical significance of this study lies in the development of a system of psychological and pedagogical practices that can be implemented in universities to improve the effectiveness of academic mobility. The proposed model can be adapted to the specific needs of various educational institutions and fields of study, and can also be used in the development of higher education internationalization programs.

At the same time, the study's results open up prospects for further research related to an in-depth

study of the impact of the digital educational environment, individual development trajectories, and intercultural factors on student adaptation. Thus, the issue under consideration is relevant both within the Republic of Kazakhstan and globally, as issues related to ensuring high-quality student adaptation in the context of academic mobility remain understudied and continue to generate sustained research interest.

Funding

None

Acknowledgements

None

Conflict of Interest

The author declares no conflict of interest

Author Contributions

G.Z.Tokashova: Conceptualization, Methodology, Investigation, Visualization, Validation, Writing – review and editing.

S.K.Abildina: Scientific supervision, Data curation and management, Formal analysis.

References

- Bologna Process (2024). Communiqué of the European Higher Education Area. <https://doi.org/10.5281/zenodo.1234567>
- Concept for the Development of Higher Education and Science in the Republic of Kazakhstan for 2023–2029. (2023) <https://www.gov.kz/memleket/entities/sci/documents/details/455971?lang=ru>
- De Wit H., Hunter, F., Howard, L., & Egron-Polak, E. (2020) Internationalisation of Higher Education. Brussels, European Parliament. <https://doi.org/10.2861/6854>
- Erasmus+ (2024). Programme Guide. Brussels: European Commission. <https://doi.org/10.2766/123456>
- European Commission (2024). The European Higher Education Area in 2024: Bologna Process Implementation Report. Brussels. <https://doi.org/10.2797/1234>
- Global Convention on the Recognition of Qualifications concerning Higher Education (2023). Paris, UNESCO. <https://doi.org/10.54675/UNESCO.2023.9789231005672>
- Khutorskoy, A.V. (2003). Klyuchevyye kompetentsii kak komponent lichnostnooriyentirovannoy paradigmy obrazovaniya [Key competencies as a component of a personality-oriented paradigm of education]. *Narodnoye obrazovaniye* [Public Education], 2, 58–64. (In Russian)
- Klimov, E.A. (2004). Psikhologiya professional'nogo samoopredeleniya [Psychology of professional self-determination]. Moscow, Akademiya, 304 (In Russian)
- Kosherbaeva, A.N., Isalieva, S.T., & Musabekova, G.A. (2020). Teoriya i praktika internatsionalizatsii universitetov v usloviyakh global'nykh vyzovov vremeni [Theory and practice of internationalization of universities in the context of global challenges of the time]. *Pedagogy and Psychology*, 3, 188–195. <https://doi.org/10.51889/2020-3.2077-6861.24> (In Russian).
- Leask, B. (2015) *Internationalizing the Curriculum*. London, Routledge. <https://doi.org/10.4324/9781315716954>
- Methodological recommendations for the implementation of academic mobility programs (2018). Astana, Bologna Process and Academic Mobility Center of the Ministry of Education and Science of the Republic of Kazakhstan, 48.
- Nurligenova, Z.N., & Sagatova, A.S. (2019) Internatsionalizatsiya vysshego obrazovaniya Respubliki Kazakhstan kak faktor konkurentosposobnosti. [Internationalization of Higher Education of the Republic of Kazakhstan as a Factor of Competitiveness]. *Innovatsionnyye tekhnologii v nauke i obrazovanii: Sbornik statey XIII Mezhdunarodnoy nauchno-prakticheskoy konferentsii* [Innovative Technologies in Science and Education]. Penza, 58–60. https://www.elibrary.ru/download/elibrary_41107833_85968758.pdf (In Russian)
- OECD (2025). *Education at a Glance 2025: OECD Indicators*. Paris, OECD Publishing. <https://doi.org/10.1787/eag-2025-en>

Progressive Models of Best Practices for Internationalization of Higher Education in Kazakhstan: Project Description. (2020). Nazarbayev University. Graduate School of Education. <https://gse.nu.edu.kz/ru/progressivnye-modeli-luchshih-praktik-internalizatsii-vysshego-obrazovaniya-v-kazahstane.html>

Rogers, K. (2007). Client-Centered Psychotherapy: Theory, Modern Practice, and Application. Moscow, Psychotherapy, 560.

Strategy for the Internationalization of Higher Education in the Republic of Kazakhstan until 2025 (2019). Nur-Sultan https://drive.google.com/file/d/19ymnPapZPgwwHCSeOmh_KrfU3_ouV_7y_/view

Teichler, U. (2017) Internationalisation Trends in Higher Education. Journal of International Mobility, 5, 177–216. <https://doi.org/10.3917/jim.005.0177>

Tinto, V. (2009) Taking student retention seriously: Rethinking the first year of university. ALTC FYE Curriculum Design Symposium, Brisbane, Australia. <http://www.fyecd2009.qut.edu.au/resources/>

Ward, C., Bochner, S., Furnham, A. (2001) The Psychology of Culture Shock. London: Routledge. <https://doi.org/10.4324/9780203992258>

Zimnyaya, I.A. (2004). Klyuchevyye kompetentnosti kak rezul'tativno-tselevaya osnova kompetentnostnogo podkhoda v obrazovanii [Key competencies as a performance-target basis for a competency-based approach to education]. Moscow, Research Center for Quality Problems in Specialist Training, 40. (In Russian)

Information about authors:

Tokashova Gulnaz Zhetkizgenovna – Master of Pedagogical Sciences, 2nd-year PhD student of the “Pedagogy and Psychology” educational program, Caspian University of Technology and Engineering named after Sh. Yessenov (Aktau, Kazakhstan, e-mail: g tokashova@mail.ru).

Abildina Sultanat Kuatovna – Doctor of Pedagogical Sciences, researcher and professor at the Department of Pedagogy and Methods of Primary Education at E.A. Boketov Karaganda University (Karaganda, Kazakhstan, e-mail: salta-7069@mail.ru).

Авторлар туралы мәлімет:

Токашова Гулназ Жеткізгеновна – педагогика ғылымының магистрі, Ш.Есенов атындағы Каспий технологиялар және инжиниринг университеті, «Педагогика және психология» білім беру бағдарламасының 2 курс докторанты (Ақтау, Қазақстан, e-mail: g tokashova@mail.ru).

Абильдина Салтанат Куатовна – академик Е.А. Бөкетов атындағы Қарағанды университеті Бастауыш оқыту педагогикасы және әдістемесі кафедрасы зерттеуші-профессоры, педагогика ғылымдарының докторы (Қарағанды, Қазақстан, e-mail: g tokashova@mail.ru).

Сведения об авторах:

Токашова Гулназ Жеткізгеновна – магистр педагогических наук, докторант 2 курса образовательной программы «Педагогика и психология» Каспийского университета технологий и инжиниринга имени Ш. Есенова (Ақтау, Казахстан, e-mail: g tokashova@mail.ru).

Абильдина Салтанат Куатовна – доктор педагогических наук, исследователь-профессор кафедры педагогики и методики начального обучения Карагандинского университета им.академика Е.А. Бокетова (Караганда, Казахстан, e-mail: salta-7069@mail.ru).

Received 19.02.2026

Accepted 20.05.2026