



# The Effectiveness of Academic Buoyancy Training on Emotional, Social, and Educational Adaptation in Geography Students at the Martyrs of Mecca Campus of Farhangian University

Asma Fooladi <sup>1</sup>, Alireza Sadeghinia <sup>2\*</sup>, Zahra Arabsalari<sup>3</sup>

<sup>1</sup> Assistant Professor, Department of Psychology, Tabaran Institute of Higher Education, Mashhad, Iran.

<sup>2</sup> Assistant Professor, Department of Geography Education, Farhangian University, Tehran, Iran (Corresponding Author).

<sup>3</sup> MA of Educational Psychology, Department of Psychology, Payam-e-Noor University, Tehran, Iran.

## Keywords:

Academic Buoyancy Training, Emotional Adaptation, Social Adaptation, Educational Adaptation, Students.

Considering the importance of adaptation, especially in students of Farhangian University, the present study aimed to determine the effectiveness of academic buoyancy training on emotional, social, and educational adaptation in geography students of the Martyrs of Mecca campus. This research was applied in terms of objective and quasi-experimental in method, with a pre-test and post-test design along with a control group. The study population consisted of geography students at the Martyrs of Mecca campus of Farhangian University in Tehran for the academic year 2023-2024. Forty students were selected as the sample using a convenience sampling method and randomly placed into two groups of 20. The experimental group underwent 12 sessions of 70-minute academic buoyancy training, while the control group received no such training during this period. The data collection tools included a demographic information form and the Sinha and Singh (1993) Adaptation Inventory, and the data obtained from their implementation were analyzed using Multivariate Analysis of Covariance in SPSS software version 25. The results showed that academic buoyancy training led to a decrease in scores (improvement) of emotional, social, and educational adaptation in geography students of the Martyrs of Mecca campus ( $P < 0.001$ ). The findings of this study indicate the effectiveness of academic buoyancy training in improving emotional, social, and educational adaptation in students. Therefore, academic buoyancy training can be utilized alongside other educational methods to enhance student adaptation.

## **1. Introduction**

Students, due to being away from family and facing academic and non-academic issues and problems, require adaptation. Adaptation is a vital matter and sets the stage for the emergence of many positive psychological characteristics, while maladaptation leads to negative psychological traits and disorders (Azila-Gbettor, Ahbenyo, Fiati, & Mensah, 2023). Humans are adaptable and flexible beings, sometimes adjusting themselves to the environment and at other times changing the environment to suit themselves (Bi & Li, 2021). Psychologists and experts pay special attention to adaptation, considering it one of the main criteria and factors of a healthy personality, which contributes to increased peace of mind in life (Billedo, Kerkhof, & Finkenauer, 2020). Adapting to new and varied situations is challenging, and any change requires adaptation or harmonizing behavior to meet needs (Alexandersen, Zachrisson, Roysamb, Wilhelmsen, Wang, & Brandlistuen, 2024). The concept of adaptation is relative and dependent on the culture and beliefs of society members, and a behavior considered adaptive in one society may be maladaptive in another (Demirtas-Zorbaz & Ergene, 2019). Adaptation has various dimensions, among which emotional, social, and educational adaptation are the most significant (Almukhambetova & Hernandez-Torrano, 2020). Emotional adaptation refers to the ability to cope with internal and external stressors and tensions, social adaptation to the ability to deal with changes and transformations in the social and environmental context, and educational adaptation to the ability to cope with educational demands and activities in an educational environment (Mittelmeier, Rienties, Rogaten, Gunter, & Raghuram, 2019). In other words, emotional adaptation indicates good mental health, resistance against stress-related effects, positive mood, life satisfaction, coherence among thoughts, feelings, activities, and the ability to maintain emotional balance and control, social adaptation indicates individual adaptation to the social environment through self or environmental change and maintaining balance in social relationships, and educational adaptation indicates the ability to successfully respond to various and diverse educational and learning demands (Arshi, 2022). Additionally, emotional adaptation refers to how students adjust to the stressful environment they are in and trust and confidence in close associates, encompassing self-esteem, positive feelings, life satisfaction, anxiety, negative and undesirable feelings, and psychological problems. Social adaptation refers to the ability of students to adapt to the frameworks and

requirements of the social and cultural environment, including interacting with friends, positive social behavior, and respectful attitudes. Educational adaptation refers to how students adapt to the requirements related to education, assignments, group activities, and exams, encompassing competence, participation in educational affairs, independent motivation, skill development, and success (Tamannaefar, Rezaei, & Hadady, 2019).

Given the numerous problems students face in terms of adaptation, it seems that one effective method in this area is the training of academic buoyancy. The construct of academic buoyancy, as one of the positive psychology constructs, means the successful ability of learners to face obstacles, problems, and educational challenges and overcome them. It is also defined as a positive, constructive, and adaptive response to various ongoing and persistent educational obstacles, problems, and challenges (Fooladi, Kajbaf, & Ghamarani, 2016). Academic buoyancy is an internal sense and energy derived from oneself to ensure mental health, and experts consider it an effective way to understand and achieve the concept of mental well-being (Gill, Singhal, Schutze, & Turner, 2021). This construct reflects educational resilience within positive psychology and has a significant impact on increasing the ability to cope with educational problems. Such individuals have a greater ability to utilize their resources and can apply more energy resources to achieve their goals (Hirvonen, Yli-Kivisto, Putwain, Ahonen, & Kiuru, 2019). When a person performs a task automatically and spontaneously, not only do they not feel tired, but they also feel an increase in energy and power. The antecedents of academic buoyancy include psychological factors (such as educational resilience, motivation, self-directed learning, and educational self-efficacy), school and participation factors (such as classroom structure, quality of time spent in class, positive attitudes towards class, and participation in improving classroom atmosphere), and family and peer factors (such as cognitive and emotional support from family and friends, and communication patterns with family and peers) (Fooladi, Kajbaf, & Ghamarani, 2018). Training in academic buoyancy plays an important and effective role in fruitful learning by increasing strength and energy, leading to the realization of competencies, abilities, and academic advancements (Azarian, Mahdian, & Jajarmi, 2020).

Few studies have been conducted on the effectiveness of academic buoyancy training on adaptation, and no research was found on the impact of such training on emotional, social, and educational adaptation in students. Khedmatgozar, Zahiri, Khalil allahi Ghouchan

Atigh, and Zahiri Khomartash (2023) conducted research on the prediction of academic adaptation and academic buoyancy, considering the role of teacher-student relationship quality. They concluded that there was a significant positive correlation between academic buoyancy and students' academic adaptation. Sharifi Rahnemo, Fathi, Azemnia, and Shokri (2022) found in their study on the effectiveness of academic buoyancy training on social desirability and social adaptation in students that 12 sessions of academic buoyancy training increased the social desirability and social adaptation of students in the experimental group compared to the control group. Nokandi and Roshandel (2022) concluded in their research on academic buoyancy as a strategy for achieving adaptation that academic buoyancy plays an effective role in improving and enhancing students' adaptability. Yaghoobi, Alimohammadi, and Azadi (2022) investigated the prediction of academic buoyancy based on cognitive emotion regulation and cognitive processing. They found that both variables, cognitive emotion regulation and cognitive processing, had a significant positive correlation with students' academic buoyancy and could significantly predict it. Ershadi Chaharkeh (2020), in a study on the effectiveness of academic buoyancy training on academic engagement and school adaptation in students, found that academic buoyancy training improved students' academic engagement and adaptation to school. Azarian et al. (2020), in a study comparing the effectiveness of academic buoyancy training and emotion regulation on academic meaning and adaptation, concluded that both academic buoyancy training and emotion regulation training were effective on both variables, significantly increasing students' academic meaning and adaptation, with no significant difference between the intervention methods in improving academic meaning and adaptation. Academic life, especially during university years, requires high adaptability and it seems that academic buoyancy training could play an effective role in improving it, though very few studies have been conducted in this area, and none were found on emotional, social, and educational adaptation in students. Furthermore, considering the importance of academic buoyancy and its role in many academic and even non-academic variables in students, the results of this study can assist educational psychologists and educational science experts in testing an intervention

method and deciding on its effectiveness. Considering the importance of adaptation, especially in students of Farhangian University, the present study aimed to determine the effectiveness of academic buoyancy training on emotional, social, and educational adaptation in geography students of the Martyrs of Mecca campus.

## **2. Methodology**

This study was applied in terms of objective and quasi-experimental in method, with a pre-test and post-test design along with a control group. The study population consisted of geography students at the Martyrs of Mecca campus of Farhangian University in Tehran for the academic year 2023-2024. Forty students were selected as the sample using a convenience sampling method and randomly placed into two groups of 20. The students were chosen based on criteria including not having conditional terms in the past, not receiving psychological services in the past three months, willingness to participate in the study, and scoring lower on the Sinha and Singh (1993) Adaptation Inventory. Also, criteria for exiting the study included missing more than two sessions and withdrawing from participation.

For this study, initial coordination was made with the Martyrs of Mecca campus of Farhangian University in Tehran, and then the Sinha and Singh (1993) Adaptation Inventory was administered to all geography students of the campus. Forty students who scored lower on this inventory were selected as the sample. The importance and necessity of the research were explained to the selected samples, ethical points were clarified, and the researchers committed to implementing them. Then, the selected samples were randomly divided into two equal groups, one as the experimental group (receiving academic buoyancy training) and the other as the control group. The experimental group underwent 12 sessions of 70-minute academic buoyancy training, while the control group received no such training during this period. The content of the academic buoyancy training, designed by Fooladi et al. (2018) based on the theory of Martin and Marsh (2008), was validated for content validity by experts using the Delphi method, and the goals and contents of each session were reported in Table 1.

Table 1: Objectives and Contents of Academic Buoyancy Training by Session

| Session Number | Objective  | Content Description  |
|----------------|--|--|
| 1              | Introduction and Goal Statement                    | Familiarization of students and researcher, stating rules and expectations like cooperation, participation, punctuality, etc., stating the goal and briefly explaining the educational content.  |
| 2              | Teaching Psychological Factors                     | Education on academic resilience including understanding the concept, role, and importance, cognitive reconstruction, fostering constructive and resilient academic thinking, awareness of academic capabilities, perceiving purposefulness in academic behaviors, and setting short-term and long-term academic goals.  |
| 3              | Teaching Intrinsic Motivation                      | Including the role of optimism and hope in education and having goals for academic mastery.  |
| 4              | Teaching Academic Self-Regulation                  | Familiarization with the concept and importance of self-regulation, use of cognitive and metacognitive strategies, self-monitoring, self-reinforcement, time and place management for study, and their role in academic improvement.   |
| 5              | Teaching Academic Self-Efficacy                    | Familiarization with the role and importance of self-efficacy and academic self-efficacy and its improvement through problem-solving.  |
| 6              | Teaching School Factors and Participation          | Education on how to obtain cognitive support from family and friends in education, the role and importance of their support in education, strategies for gaining their support, and how to solve cognitive academic problems with student participation.   |
| 7              | Teaching Emotional Support from Family and Friends | Importance of their support in education, strategies for gaining their support, and how to solve emotional academic problems like academic stress, anxiety, etc., with student participation.  |
| 8              | Teaching Communication Patterns                    | Constructive interaction with family and friends in education, patterns of dialogue and listening, understanding communication barriers and how to overcome them, skills for constructive communication emphasizing self-awareness and empathy, and effective intra-personal and inter-personal communication.   |
| 9              | Teaching Family and Peer Factors                   | Perception and positive attitude towards class structure and goals, awareness, and understanding of class structures and goals and their role in education, the role of students and teachers in class structure and goals, and teaching positive perception of class structure and goals.   |
| 10             | Teaching to Improve Quality Time in Class          | How to manage class before the teacher's entry and the importance of this time in education, the importance of studying headings before the teacher enters the class, managing class in the last minutes, the importance of studying materials on the day of teaching, and planning for spending time in class and at home.  |
| 11             | Teaching the Importance of Participation           | For improving class environment and official and unofficial communication networks of friends, strategies for student participation in class environment and its role in education, finding educational puzzles or humor with the participation of students and teacher to create variety and educational interest, and improving official and unofficial communication networks to perceive positively the class environment. |
| 12             | Summary and Review                                 | Summary and review of the contents of previous sessions with student participation.  |

In this study, data collection involved a demographic information form and the Sinha and Singh (1993)

Adaptation Inventory. This inventory consisted of 60 items and three factors: emotional, social, and

educational adaptation (each factor with 20 items), using yes and no responses corresponding to scores of zero and one. Thus, the score range for each factor was between zero to 20, with lower scores indicating greater adaptation in each factor. The construct validity of the tool was examined using exploratory factor analysis, and the results showed the presence of three factors of emotional, social, and educational adaptation. Their reliability was obtained using Cronbach's alpha and retest methods, with values above 0.70. In Iran, Naveedy (2009) confirmed the convergent validity of the Adaptation Inventory with the Bell Adjustment Questionnaire and calculated the reliability of the three adaptations: emotional, social, and educational, using the split-half method, respectively as 0.68, 0.65, and 0.70. Also, Tamannaefar et al. (2019) reported the overall reliability of the tool using Cronbach's alpha for undergraduate students at the University of Kashan as 0.82. In the present study, the reliability of the three adaptations: emotional, social, and educational, was

obtained as 0.78, 0.73, and 0.75, respectively, using Cronbach's alpha on students of Farhangian University. It is worth mentioning that the data from this study were analyzed using Multivariate Analysis of Covariance in SPSS software version 25 at a significance level of 0.05.

**3. Findings**

In this study, analyses were conducted for two groups of 20 individuals each. In the experimental group, there were 7 first-year students (35%), 6 second-year students (30%), 4 third-year students (20%), and 3 fourth-year students (15%). In the control group, there were 6 first-year students (30%), 6 second-year students (30%), 5 third-year students (25%), and 3 fourth-year students (15%). The mean and standard deviation of the pre-test and post-test for emotional, social, and educational adaptation among geography students of the Martyrs of Mecca campus are presented in Table 2.

Table 2. Pre-test and Post-test Mean and Standard Deviation of Emotional, Social, and Educational Adaptation in Geography Students at Martyrs of Mecca Campus

| Variable               | Stage     | Group        | Mean  | SD   |
|------------------------|-----------|--------------|-------|------|
| Emotional Adaptation   | Pre-test  | Experimental | 11.06 | 1.65 |
|                        | Pre-test  | Control      | 10.89 | 1.72 |
|                        | Post-test | Experimental | 8.43  | 1.26 |
|                        | Post-test | Control      | 10.92 | 1.68 |
| Social Adaptation      | Pre-test  | Experimental | 10.68 | 2.30 |
|                        | Pre-test  | Control      | 10.75 | 2.68 |
|                        | Post-test | Experimental | 8.15  | 2.14 |
|                        | Post-test | Control      | 10.63 | 2.75 |
| Educational Adaptation | Pre-test  | Experimental | 12.37 | 1.97 |
|                        | Pre-test  | Control      | 12.50 | 2.13 |
|                        | Post-test | Experimental | 8.25  | 1.11 |
|                        | Post-test | Control      | 12.57 | 2.03 |

As observed in Table 2, the mean scores for emotional, social, and educational adaptation among the geography students of the Martyrs of Mecca campus in the experimental group decreased more from the pre-test to the post-test phase compared to the control group. A greater decrease in the adaptation inventory scores indicates improvement in emotional, social, and educational adaptation. Before analyzing the data with the Multivariate Analysis of Covariance method, its assumptions were checked. Based on the Kolmogorov-Smirnov and Shapiro-Wilk tests, the assumption of normal distribution for emotional, social, and educational adaptation in both groups during pre-test and post-test phases was met, as the significance was greater than 0.05. Furthermore, based on the Levene's test

values, the assumption of homogeneity of variances for emotional, social, and educational adaptation variables was met, due to significance greater than 0.05. Additionally, the assumption of homogeneity of covariances was met based on the Box's M test, with significance greater than 0.05. Therefore, using the Multivariate Analysis of Covariance method is permissible. Multivariate tests to determine the effectiveness of academic buoyancy training on emotional, social, and educational adaptation among geography students of the Martyrs of Mecca campus are shown in Table 3.

Table 3: Multivariate Tests for Determining the Effectiveness of Academic Liveliness Training on Emotional, Social, and Educational Adaptation in Geography Students at Martyrs of Mecca Campus

| Test               | Value | F     | p      | Effect Size | Power |
|--------------------|-------|-------|--------|-------------|-------|
| Pillai's Trace     | 0.34  | 11.25 | <0.001 | 0.68        | 0.95  |
| Wilks' Lambda      | 0.11  | 11.25 | <0.001 | 0.68        | 0.95  |
| Hotelling's Trace  | 1.85  | 11.25 | <0.001 | 0.68        | 0.95  |
| Roy's Largest Root | 1.85  | 11.25 | <0.001 | 0.68        | 0.95  |

As seen in Table 3, the results of all four tests - Pillai's Trace, Wilks' Lambda, Hotelling's Trace, and Roy's Largest Root - indicated that academic buoyancy training caused a significant change in at least one of the areas of emotional, social, or educational adaptation in the geography students of the Martyrs of Mecca campus ( $P < 0.001$ ). Moreover, considering the effect size, it can be said that 68% of the change in emotional, social, and

educational adaptation was the result of the intervention method, i.e., academic buoyancy training. Multivariate Analysis of Covariance for determining the effectiveness of academic buoyancy training on each of emotional, social, and educational adaptation in geography students of the Martyrs of Mecca campus is presented in Table 4.

Table 4: Multivariate Analysis of Covariance for Determining the Effectiveness of Academic Liveliness Training on Emotional, Social, and Educational Adaptation in Geography Students at Martyrs of Mecca Campus

| Variable               | Source | SS    | df | MS    | F     | Significance | Effect Size | Power |
|------------------------|--------|-------|----|-------|-------|--------------|-------------|-------|
| Emotional Adaptation   | Group  | 85.26 | 1  | 85.26 | 9.70  | <0.001       | 0.56        | 0.92  |
| Social Adaptation      | Group  | 98.73 | 1  | 98.73 | 12.24 | <0.001       | 0.78        | 0.98  |
| Educational Adaptation | Group  | 91.15 | 1  | 91.15 | 10.35 | <0.001       | 0.67        | 0.95  |

As observed in Table 4 and considering the mean values, academic buoyancy training resulted in a decrease in scores (improvement) in emotional, social, and educational adaptation among the geography students of the Martyrs of Mecca campus ( $P < 0.001$ ). Also, considering the effect size, it can be said that 56% of the change in emotional adaptation, 78% of the change in social adaptation, and 67% of the change in educational adaptation was the result of the intervention method, i.e., academic buoyancy training.

#### 4. Conclusion

Adaptation and efforts to enhance it in emotional, social, and educational areas, especially among students, are of great importance. Adaptation is a crucial and vital variable for students, and it appears that academic buoyancy training can play an effective role in its improvement and enhancement. Therefore, the present study was conducted with the aim of determining the effectiveness of academic buoyancy training on emotional, social, and educational adaptation in geography students of the Martyrs of Mecca campus. The results of this study indicated that academic buoyancy training led to a decrease in scores or improvement and enhancement of emotional, social, and educational adaptation in geography students of the

Martyrs of Mecca campus. A lower score in the Sinha and Singh (1993) Adaptation Inventory indicates greater adaptation in each of the factors or types of emotional, social, and educational adaptation. Although no study was found on the effectiveness of academic buoyancy training on emotional, social, and educational adaptation, and all found studies were on students, the results of this study are consistent with the findings of Khedmatgozar et al. (2023) regarding the significant positive correlation between academic buoyancy and students' academic adaptation, Sharifi Rahnego et al. (2022) on the effectiveness of academic buoyancy training in increasing social desirability and social adaptation in students, Nokandi and Roshandel (2022) on the effective role of academic buoyancy in improving and enhancing learners' adaptation, Yaghoobi et al. (2022) on the significant positive correlation of cognitive emotion regulation and cognitive processing with students' academic buoyancy, Ershadi Chahardeh (2020) on the effectiveness of academic buoyancy training in improving academic engagement and school adaptation in students, and Azarian et al. (2020) on the effectiveness of academic buoyancy training in increasing academic meaning and academic adaptation in students. In explaining the effectiveness of academic buoyancy training on reducing the score or improving and

enhancing emotional, social, and educational adaptation in geography students of the Martyrs of Mecca campus, based on the research of Azarian et al. (2020), it can be inferred that academic buoyancy training leads to an increase in learners' interest in education and enhances their energy, ability, and educational motivation, providing the necessary impetus to successfully complete a task or duty. Therefore, students with high academic buoyancy have more interest and motivation and a more positive outlook towards themselves, others, society, and education. As a result, these factors cause academic buoyancy training to lead to a better understanding of academic meaning, more energy to face educational challenges, and quicker adaptation to various and diverse social and educational environments. Thus, these aspects contribute to the effectiveness of academic buoyancy training in improving types of adaptation including emotional, social, and educational adaptation in students. Also, based on the research of Sharifi Rahnemo et al. (2022), it can be inferred that learners with low academic buoyancy typically feel anxiety, depression, lethargy, sorrow, disinterest, demotivation, fatigue, and despair, and are indifferent, incapable, and helpless in facing educational challenges, leading to more significant problems, particularly decreased academic performance and progress, and increased academic burnout. In daily academic life, students face various obstacles, challenges, and problems that threaten their self-confidence, motivation, and consequently academic performance. Some students succeed in facing these challenges, while others do not achieve satisfactory success. Therefore, it must be acknowledged that academic buoyancy refers to a positive, constructive, and adaptive response to various educational challenges and obstacles, such as poor grades, decreased motivation, stress levels, etc., and is one of the components of adaptation, particularly educational adaptation. Consequently, when a student performs a task spontaneously and automatically, they not only feel less tired and discouraged but also experience an increase in energy and strength. Having such a feeling in the academic context leads to increased effort and perseverance, improving academic and even non-academic performance of students and enhancing their adaptation. Another important point is that academic buoyancy training refers to a positive, constructive, and adaptive response to various educational challenges and obstacles, such as poor grades, high stress levels, decreased educational motivation, etc., and buoyancy is one of the components of adaptation. When an individual performs a task spontaneously and automatically, the resulting feeling leads to increased effort, perseverance, and adaptation in various areas. Given the points raised, it seems logical

that academic buoyancy training can lead to increased and improved types of adaptation, including emotional, social, and educational adaptation in students.

Every research encounters limitations during its implementation, and the limitations of this study include the single-gender nature of the population and the restriction of the research population to geography students of the Martyrs of Mecca campus of Farhangian University in Tehran. Therefore, further research on both genders and on students of other disciplines of the Martyrs of Mecca campus and even students from other cities is suggested. Also, in this study, a non-random convenience sampling method was used to select samples, and the long-term stability of the intervention method's effectiveness was not examined. Therefore, it is recommended that future research use random sampling methods, if possible, to reduce sampling error and examine the stability of the effectiveness of academic buoyancy training on various variables in short-term follow-ups of two to three months and long-term follow-ups of six months and even one year. Another research suggestion is to compare the effectiveness of academic buoyancy training on emotional, social, and educational adaptation in students compared to other educational methods such as self-regulation training, cognitive and metacognitive strategy training, emotion regulation training, etc. The results of this study indicate the effectiveness of academic buoyancy training in improving emotional, social, and educational adaptation in students. Therefore, academic buoyancy training can be used alongside other educational methods to enhance student adaptation.

### **Acknowledgments**

At the end of this study, the researchers feel obliged to thank everyone who played a role in the successful completion of this study.

### **Ethical Considerations**

For the selected samples of the current study, the importance and necessity of the research were explained, and the ethical points were clarified for them, and the researchers committed to implementing them.

### **Conflict of Interest**

There was no conflict of interest among the authors of this study.

### **References**

Alexandersen N, Zachrisson HD, Roysamb E, Wilhelmsen T, Wang MV, Brandlistuen RE. (2024). Preschool structural quality and student-teacher

- closeness are related to children's adjustment: sibling-informed design. *Early Childhood Research Quarterly*, 66, 48-60. doi: 10.1016/j.ecresq.2023.08.009
- Almukhambetova A, Hernandez-Torrano D. (2020). On being gifted at university: Academic, social, emotional, and institutional adjustment in Kazakhstan. *Journal of Advanced Academics*, 32(1), 1-22. doi: 0.1177/1932202X20951825
- Arshi S. (2022). Predicting social adjustment based on the ability to solve social problems and self-compassion in adolescents. *Journal of Health Sciences & Surveillance System*, 10(2), 216-221. doi: 10.30476/jhsss.2021.90155.1180
- Azarian R, Mahdian H, Jajarmi M. (2020). Comparison the effectiveness of academic buoyancy and emotion regulation training on academic meaning and academic adjustment. *Journal of Research in Educational Systems*, 14(Special Issue), 483-494. [Persian]
- Azila-Gbettor EM, Ahbenyo L, Fiati HM, Mensah C. (2023). Student adjustment during Covid-19 pandemic: Exploring the moderating role of university support. *Heliyon*, 9(3), e13625. doi: 10.1016/j.heliyon.2023.e13625
- Bi D, Li X. (2021). Psychological flexibility profiles, college adjustment, and subjective well-being among college students in China: A latent profile analysis. *Journal of Contextual Behavioral Science*, 20, 20-26. doi: 10.1016/j.jcbs.2021.01.008
- Billedo CJ, Kerkhof P, Finkenauer C. (2020). More facebook, less homesick? Investigating the short-term and long-term reciprocal relations of interactions, homesickness, and adjustment among international students. *International Journal of Intercultural Relations*, 75, 118-131. doi: 10.1016/j.ijintrel.2020.01.004
- Demirtas-Zorbaz S, Ergene T. (2019). School adjustment of first-grade primary school students: Effects of family involvement, externalizing behavior, teacher and peer relations. *Children and Youth Services Review*, 101, 307-316. doi: 10.1016/j.childyouth.2019.04.019
- Ershadi Chaharkeh Sh. (2020). Effectiveness of academic buoyancy training on academic engagement and adjustment to school in firth high school students. *Iranian Journal of Educational Sociology*, 3(2), 11-19. doi: 10.52547/ijes.3.2.11
- Fooladi A, Kajbaf MB, Ghamarani A. (2016). Effectiveness of academic buoyancy training on academic meaning and academic performance of third grade girl students at the first period of high school in Mashhad city. *Quarterly Journal of Research in School and Virtual Learning*, 4(3), 93-103. [Persian]
- Fooladi A, Kajbaf MB, Ghamarani A. (2018). Effectiveness of academic buoyancy training on academic success and academic self-efficacy of girl students. *Journal of Instruction and Evaluation*, 11(42), 37-53. [Persian]
- Gill AC, Singhal G, Schutze GE, Turner TL. (2021). Educational coaches: Facilitating academic buoyancy and a pathway to promotion for clinician-educators. *The Journal of Pediatrics*, 235, 3-5. doi: 10.1016/j.jpeds.2020.11.042
- Hirvonen R, Yli-Kivisto L, Putwain DW, Ahonen T, Kiuru N. (2019). School-related stress among sixth-grade students – Associations with academic buoyancy and temperament. *Learning and Individual Differences*, 70, 100-108. doi: 10.1016/j.lindif.2019.01.012
- Khedmatgozar M, Zahiri F, Khalil allahi Ghouchan Atigh SM, Zahiri Khomartash H. (2023). Predicting academic adjustment and academic buoyancy of primary school students according to the role of the quality of teacher-student communication. *Journal of New Developments in Psychology, Educational Sciences and Education*, 6(60), 256-268. [Persian]
- Martin AJ, Marsh HW. (2008). Academic buoyancy: Towards an understanding of students' everyday academic resilience. *Journal of School Psychology*, 46, 53-83. doi.org/10.1016/j.jsp.2007.01.002
- Mittelmeier J, Rienties B, Rogaten J, Gunter A, Raghuram P. (2019). Internationalisation at a distance and at home: Academic and social adjustment in a South African distance learning context *International Journal of Intercultural Relations*, 72, 1-12. doi: 10.1016/j.ijintrel.2019.06.001
- Naveedy A. (2009). The efficacy of anger management training on adjustment skills of high school male students in Tehran. *Iranian Journal of Psychiatry and Clinical Psychology*, 14(4), 394-403.
- Nokandi H, Roshandel H. (2022). Academic buoyancy: A solution to achieve adjustment The Third National Conference of the Future School. University of Mohaghegh Ardebili.
- Sharifi Rahnemo S, Fathi A, Azemnia Z, Shokri R. (2022). The effectiveness of academic buoyancy training on social desirability and social adjustment of secondary school students. *Curriculum and Instruction Perspective Journal*, 2(3), 17-29. [Persian] doi: 10.22034/cipj.2022.53402.1064



- Sinha AKP, Singh RP. (1993). Adjustment inventory for school students. Agra: National Psychological Corporation.
- Tamannaefar M, Rezaei H, Hadady S. (2019). Prediction of Students academic performance based on adjustment (academic, emotional and social) and personality traits. *Medical Journal of Mashhad University of Medical Sciences*, 62, 374-387. doi: 10.22038/mjms.2019.14885 [Persian]
- Yaghoobi A, Alimohammadi H, Azadi E. (2022). Predicting students' academic buoyancy based on cognitive emotion regulation and cognitive processing. *Biquarterly Journal of Cognitive Strategies in Learning*, 10(18), 135-154. [Persian] doi: 10.22084/j.psychogy.2021.24302.2316