Bahria Journal of Professional Psychology, September 2025, Vol. 24, No. 1, 40-47

Self-Efficacy, Academic Buoyancy, and Cross-Cultural Adjustment among Students from Balochistan and Khyber Pakhtunkhwa

*Bibi Kainat Khilji[1], Omama Tariq[1], and Saima Ambreen[2]

[1]Institute of Applied Psychology, University of the Punjab, Lahore, Pakistan

[2]Univesrity of Balochistan, Quetta, Pakistan

This study explored how self-efficacy and academic buoyancy are related to cross-cultural adjustment among university students. The sample consisted of 492 students recruited from different universities in Lahore, Balochistan, and Khyber Pakhtunkhwa. Of these, 246 participants were from Lahore, 170 from Balochistan, and 76 from Khyber Pakhtunkhwa. A quantitative, cross-sectional design was employed, and participants were selected through non-probability purposive and snowball sampling strategies. Data were gathered using an online survey that included a demographic information sheet, informed consent form, the Generalized Self-Efficacy Scale (Schwarzer, 1981), the Academic Buoyancy Scale (Martin & Marsh, 2008), and the Cross-Cultural Adjustment Scale (Black & Stephens, 1989). Analyses were carried out in SPSS, incorporating Pearson correlation, multiple linear regression, and independent samples t-test. The findings demonstrated significant positive associations among all study variables. Furthermore, both self-efficacy and academic buoyancy significantly predicted cross-cultural adjustment. Gender differences were also observed in levels of cross-cultural adjustment. The study concludes with methodological limitations and practical suggestions for future investigations.

Keywords. Self-efficacy, Academic buoyancy, Cross-cultural adjustment, Balochistan, Khyber Pakhtunkhwa.

*Correspondence concerning this article should be addressed to Bibi Kainat Khilji, Institute of Applied Psychology, University of Punjab, Lahore, Pakistan. Email:

Interprovincial higher education in Pakistan offers valuable academic and cultural exposure for students; however, those relocating from provinces like Balochistan and Khyber Pakhtunkhwa often face significant challenges. These challenges arise as students navigate unfamiliar educational systems and adapt to cultural norms embedded within those systems. Self-efficacy plays a crucial role in facilitating this transition, acting as a protective factor that strengthens both academic and psychological adaptation (Rashid et al., 2021). Studies have consistently highlighted a strong link between students' academic self-efficacy and their capacity to socially integrate and cope with the demands of university life (Malik et al., 2024; Kayani et al., 2023). Moreover, factors such as language barriers, cultural differences, and disparities in institutional academic support can lead to acculturative stress, negatively affecting students' adjustment and well-being (Kayani et al., 2023). Although government initiatives such as reserved quotas and scholarship programs aim to support students from underrepresented regions, ongoing structural and cultural barriers continue to undermine their confidence and academic performance.

Self-efficacy

Self-efficacy is a fundamental construct in psychology that significantly impacts motivation, behavior, and learning. Bandura (1977), who introduced the concept, defined self-efficacy as individuals' beliefs in their ability to organize and carry out actions necessary to achieve specific performance goals. This belief system influences emotional responses, thinking patterns, and behavioral choices, especially under challenging conditions. Schunk and Pajares (2002) also emphasized the central role of self-efficacy in educational contexts,

where it shapes goal setting, perseverance, and emotional resilience following academic setbacks. According to Zimmerman (2000), self-efficacy serves as a critical mediator between self-regulated learning strategies and academic success, thus playing an essential role in educational achievement.

Empirical research has consistently shown that students with higher academic self-efficacy demonstrate increased intrinsic motivation, effective learning strategies, and better academic performance (Komarraju & Nadler, 2013; Chemers et al., 2001). Within the context of cross-cultural transitions in education, students from underrepresented regions often face linguistic and cultural challenges that affect their academic adaptation. In such scenarios, self-efficacy enhances their ability to manage these challenges effectively. For example, international students with higher self-efficacy report better psychological adjustment and social integration during transitions (Chavajay & Skowronek, 2008; Yeh & Inose, 2003). Pintrich and De Groot (1990) emphasize that self-efficacy not only influences academic performance but also plays a central role in motivating students to use cognitive and metacognitive strategies. Students who believe in their capabilities are more likely to exert effort, persist in difficult tasks, and regulate their learning effectively. Similarly, Klassen (2004) investigated self-efficacy among Canadian and Asian immigrant students and found that those with high academic self-efficacy were better able to adapt to classroom challenges, showing more resilience and better academic outcomes. This highlights the cross-cultural relevance of self-efficacy in promoting student adjustment and achievement across diverse educational environments. Although initiatives like scholarships and reserved quotas exist to support students from marginalized areas in Pakistan, persistent structural and cultural disparities continue to impact their academic confidence and adjustment.

Academic buoyancy

Academic buoyancy refers to students' ability to effectively navigate and recover from everyday academic challenges such as low test scores, exam-related stress, or temporary lack of motivation. Martin and Marsh (2008) describe academic buoyancy as students' capacity to manage the typical setbacks and fluctuations experienced during routine school life. Unlike resilience, which often pertains to more serious or long-term adversity, academic buoyancy focuses on students' responses to common academic difficulties. Research indicates that buoyant students tend to demonstrate higher levels of motivation, self-efficacy, and academic engagement. For instance, Martin et al. (2010) found that academically buoyant students display stronger perseverance, optimism, and emotional regulation, which are associated with improved academic performance and lower anxiety.

McLellan and Steward (2015) emphasized that buoyant learners are more likely to maintain emotional control and confidence, particularly in high-pressure academic environments. Similarly, Collie, Ginns, and Martin (2015) argued that academic buoyancy stems from both individual traits such as positive self-beliefs and contextual supports like teacher encouragement, which together help students stay focused and resilient in the face of academic demands. Malik and Shah (2022) reported that South Asian students with higher academic buoyancy were better able to manage exam stress and adjust to learning environments away from home, particularly in cross-cultural settings. Further supporting this, Putwain et al. (2012) found that academic buoyancy significantly moderates the relationship between academic stress and test anxiety, allowing students to maintain performance under pressure. Likewise, Datu and Yang (2018) highlighted that academic buoyancy plays a key role in positive academic outcomes among students in collectivist cultures, emphasizing the importance of social and emotional strengths in educational success.

Cross-Cultural Adjustment

Cross-cultural adjustment refers to the psychological and behavioral changes individuals undergo as they adapt to a new cultural environment. Black, Mendenhall, and

Oddou (1991) described it as the extent to which a person feels psychologically comfortable and familiar in a foreign culture. Black and Stephens (1989) further elaborated that this process comprises three core dimensions: adjustment to general living conditions, interaction with host nationals, and academic or work-related adaptation. For university students, this extends to adapting to unfamiliar teaching styles, academic expectations, language, communication norms, and institutional culture.

Personal attributes such as self-efficacy and academic buoyancy play a critical role in navigating these transitions. Ward and Kennedy (1999) demonstrated that individuals with strong self-efficacy tend to adapt better and experience less cultural stress. Chen (2010) supported this by emphasizing that psychological strengths like confidence, optimism, and resilience help buffer the pressures of academic and cultural adaptation. Similarly, Duru and Poyrazli (2011) found that social support networks and high self-efficacy significantly enhance students' ability to adjust in unfamiliar academic settings. Andrade (2006) highlighted that students' feelings of belonging, peer acceptance, and accessible academic support contribute meaningfully to their adjustment process.

In addition, Misra and Castillo (2004) reported that self-efficacy mitigates academic stress and facilitates coping strategies among international students, particularly in demanding environments. Research by Smith and Khawaja (2011) also emphasized that emotional and academic adjustment is strongly influenced by personal psychological resources, especially for students facing sociocultural gaps or studying in unfamiliar contexts. These findings collectively reinforce the idea that fostering individual strengths and inclusive academic environments can significantly ease the challenges of cross-cultural adjustment.

Rationale of the study

As increasing numbers of students in Pakistan pursue higher education outside their home provinces particularly those from Balochistan and Khyber Pakhtunkhwa relocating to universities in Punjab it has become essential to understand how they navigate cultural and educational transitions. These students often encounter challenges such as language barriers, unfamiliar teaching practices, and social integration difficulties, which can negatively impact their academic success and psychological well-being. While self-efficacy and academic buoyancy are recognized for their positive influence on academic performance and coping abilities, limited research has explored how these factors contribute specifically to cross-cultural adjustment among university students. This study aimed to fill that gap by investigating the extent to which self-efficacy and academic buoyancy predict cross-cultural adjustment among students from diverse ethnic and regional backgrounds. The findings are expected to inform educators and policymakers in developing targeted support strategies that enhance student adaptation, academic achievement, and overall well-being.

Objectives

1. To examine the relationship between self-efficacy, academic buoyancy, and cross-cultural adjustment among university students from Balochistan and Khyber Pakhtunkhwa.
2. To assess whether self-efficacy and academic buoyancy significantly predict cross-cultural adjustment.
3. To explore gender differences in self-efficacy, academic buoyancy, and cross-cultural adjustment among university students.

Hypotheses

H1: Self-efficacy and academic buoyancy are likely to be positively associated with cross-cultural adjustment among students from Balochistan and Khyber Pakhtunkhwa.

H2: Self-efficacy and academic buoyancy will significantly predict cross-cultural adjustment among university students.

H3: Male and female students are likely to differ significantly in their levels of self-efficacy, academic buoyancy, and cross-cultural adjustment.

Methodology

Research Design

The study adopted a correlational research design to explore the associations among the key variables of interest.

Sampling Strategy

Participants were recruited using a combination of non-probability purposive sampling and snowball sampling techniques to ensure access to the target population.

Sample Description

The sample consisted of 492 university students, aged between 17 and 25 years, who were studying in universities located in Lahore at the time of this research. Among these, 246 were cross-cultural students, i.e., they belonged to areas other than Lahore. These 246 students were selected to be a part of the present research, wherein 170 students were from Balochistan, and 76 were from Khyber Pakhtunkhwa. Overall, 55% of the participants identified as male and 45% as female. Regarding academic background, 13% were enrolled in BS (Hons) programs, 73% in Master's programs, and 14% in MS/MPhil programs. Prior to participation, an informed consent form was provided, and written consent was obtained from all participants.

Assessment Measures

Informed Consent Form

Participants were briefed on the study's objectives, procedures, and confidentiality assurances. They were informed that participation was voluntary, the survey would take approximately 15 minutes to complete, and they could withdraw at any point without penalty.

Demographic Information Sheet

A self-constructed questionnaire was used to collect background data, including participants' age, gender, education level, and socioeconomic status.

Generalized Self-Efficacy Scale (GSES)

Developed by Schwarzer and Jerusalem (1995), this 10-item instrument measures an individual's belief in their ability to manage challenges and accomplish goals. The scale is well-established, with reported internal consistency reliability typically exceeding .80.

Academic Buoyancy Scale

Designed by Martin and Marsh (2008), this tool assesses students' capacity to deal effectively with everyday academic difficulties. It demonstrates acceptable reliability, with Cronbach's alpha values generally ranging between .70 and .85.

Cross-Cultural Adjustment Scale

Initially developed by Black (1988), this measure evaluates an individual's adjustment to new cultural settings, including aspects of social, general, and academic/work adaptation. Reported reliability for the scale exceeds .75.

Procedure

Permission to use the assessment tools was obtained from the original authors via email communication. Data were collected online using purposive sampling from a total of 246 university students originating from Balochistan and Khyber Pakhtunkhwa. Prior to data collection, participants were provided with an informed consent form and assured of their

anonymity and the confidentiality of their responses. Data analysis was conducted using SPSS version 21.

Results

Table 1

Descriptive Statistics and Reliability Coefficients for Study Variables (N = 246)

				Range				
Variables	*k*	*M*	*SD*	Potential	Actual	*α*	Skewness	Kurtosis
GSE	10	29.11	6.14	10-40	10-40	.83	–.28	.02
AB	4	16.31	6.46	9-35	4-28	.86	–.08	–.96
CCA	9	27.31	8.67	9-45	9-45	.85	.07	–.45

Note. *α* = Cronbach's alpha, GSE = Generalized self-efficacy, AB = Academic Buoyancy, CCA = Cross-cultural adjustment

Table 1 shows the descriptive statistics, reliability coefficients, and normality indices of the study variables. Internal consistency was adequate, with Cronbach's alpha values ranging from .83 to .86. The skewness values ranged from –0.28 to 0.07, and kurtosis values ranged from –0.96 to 0.02, all of which fall within the acceptable range of –2 to +2. These results indicate that the data were approximately normally distributed and suitable for parametric statistical analyses.

Table 2

Pearson Product Moment Correlation between Variables (N=246)

Variables	1	2	3
1. Academic Buoyancy	-	.40***	.58***
2. Cross-Cultural Adjustment		-	.40***
3. Self-Efficacy			-

Note. ***p<.001

Table 2 presents the correlations among academic buoyancy, cross-cultural adjustment, and self-efficacy among university students. The analysis revealed that academic buoyancy was positively associated with both cross-cultural adjustment and self-efficacy, indicating that students who are more academically resilient tend to adjust better to new cultural settings and hold stronger beliefs in their abilities. Similarly, self-efficacy also showed a meaningful positive relationship with cross-cultural adjustment.

Table 3

Multiple Linear Regression Analysis (N=246)

				95%CI		
Predictors	*B*	SE	B	*LL*	*UL*	*p*
Intercept	11.11	2.50		6.18	16.04	.00
Academic Buoyancy	.34	.09	.25	.15	.53	.00
Self-efficacy	.36	.10	.25	.16	.56	.00
F	31.01					
R^2	.20					

Note. 95% CI = Confidence Interval, LL = Lower Limit, UL = Upper Limit.

Table 3 shows the multiple linear regression analysis conducted to examine whether academic buoyancy and self-efficacy predicted cross-cultural adjustment. The overall model was significant, F (2, 243) = 31.01, p < .001, with an R^2 value of .20, indicating that 20% of the variance in cross-cultural adjustment was explained by the predictors. Both academic

buoyancy (B = .34, 95% CI [0.15, 0.53], p < .001) and self-efficacy (B = .36, 95% CI [0.16, 0.56], p < .001) emerged as significant positive predictors of cross-cultural adjustment.

Table 4

Independent Samples t-Test Comparing Study Variables by Gender (N = 246)

	Men (n=137)		Women (n=109)				95% CI		
Variables	*M*	*SD*	*M*	*SD*	*t(244)*	*p*	*LL*	*UL*	Cohen's d
AB	17.17	5.92	15.75	6.77	1.75	.08	-.17	3.01	0.22
CCA	25.76	8.17	29.73	8.58	-3.69	.00	-6.08	-1.85	0.47
SE	29.48	5.62	29.11	6.22	.48	.62	-1.12	1.85	0.06

Note. AB = Academic Buoyancy, CCA = Cross-cultural adjustment, SE = Self-efficacy.

Table 4 presents the results of an independent samples t-test conducted to examine gender differences across the study variables. The findings indicated that there was no statistically significant difference between male and female students in terms of academic buoyancy, although a small effect size was noted, suggesting a slight tendency for males to report higher scores. In contrast, a meaningful gender difference was observed in cross-cultural adjustment, with female students reporting notably higher levels of adjustment compared to their male counterparts. This difference was statistically significant and reflected a moderate effect size, highlighting a potentially important distinction in how genders adapt to new cultural environments. However, no significant difference emerged between men and women on the self-efficacy scale, indicating that both groups held similar beliefs about their personal capabilities to manage challenges and achieve goals.

Discussion

This study evaluated the functions of self-efficacy and academic buoyancy in the development of cross-cultural adjustment between University students of Balochistan and Khyber Pakhtunkhwa who were undertaking Universities in Punjab province. The first hypothesis proposed that self-efficacy, academic buoyancy, and cross-cultural adjustment would be positively related. The findings supported this assumption, as significant positive correlations were observed among all three variables. This suggests that students who believe in their own abilities and demonstrate resilience in coping with everyday academic challenges are better positioned to adapt to unfamiliar cultural and educational environments. These results are consistent with earlier research emphasizing the role of self-belief and resilience in enhancing adaptation and academic success (Bandura, 1997; Martin & Marsh, 2008; Martin et al., 2010). They also resonate with Social Cognitive Theory, which highlights how confidence in one's capacities fosters successful adjustment in new contexts (Ward & Kennedy, 1999; Misra & Castillo, 2004).

The second hypothesis stated that self-efficacy and academic buoyancy would predict cross-cultural adjustment. This was confirmed through regression analysis, which demonstrated that both variables significantly contributed to explaining students' adjustment. Together, they accounted for 20% of the variance in cross-cultural adjustment, with academic buoyancy emerging as the stronger predictor. This finding underscores the role of resilience in not only overcoming academic challenges but also in facilitating broader cultural adaptation. The results align with prior research emphasizing the importance of developing adaptive coping skills and psychological resources to support student success in cross-cultural learning environments (Andrade, 2006; Chen, 2010).

The third hypothesis predicted gender differences in self-efficacy, academic buoyancy, and cross-cultural adjustment. The findings partially supported this expectation, revealing significant gender differences only in cross-cultural adjustment, where female

students reported higher levels of adjustment compared to male students. This contrasts with some previous research that suggested male students adapt more effectively to new academic transitions (Jones, 1986). However, the result may be explained by the stronger interpersonal support networks and coping strategies often available to female students, which enhance their ability to manage cultural transitions. Prior studies have also emphasized that social connectedness and emotional support act as buffers against stress and improve adjustment outcomes (Smith & Khawaja, 2011; Poyrazli & Duru, 2011).

Conclusion

This study aimed to examine the interrelationship between self-efficacy, academic buoyancy, and cross-cultural adjustment among university students. The results indicated a significant association among these variables. Both self-efficacy and academic buoyancy emerged as significant predictors of cross-cultural adjustment. Notably, self-efficacy also appeared to serve as a mediating factor in the adjustment process. Gender differences were observed in cross-cultural adjustment, with female students showing higher adjustment levels, while no significant gender differences were found for self-efficacy or academic buoyancy. These findings contribute to the growing body of literature by addressing the academic and psychological experiences of students from Balochistan and Khyber Pakhtunkhwa.

Limitations

The scope of this study was confined to students from Balochistan and Khyber Pakhtunkhwa pursuing higher education in Lahore, which may limit the broader applicability of the results. The use of purposive and snowball sampling techniques may have introduced sampling bias. Furthermore, the reliance on self-report measures raises concerns about potential response bias. The cross-sectional nature of the study also restricts any conclusions regarding causal relationships between the variables.

Recommendations

Future studies should aim to include a more demographically diverse and representative sample from multiple provinces to enhance generalizability. Employing longitudinal research designs and incorporating qualitative approaches, such as in-depth interviews, would provide a richer understanding of student adjustment processes. Additionally, it is recommended to investigate the influence of institutional support mechanisms and consider other contributing factors, such as academic performance and psychological well-being.

References

Andrade, M. S. (2006). International students in English-speaking universities: Adjustment factors. *Journal of Research in International Education, 5*(2), 131–154. https://doi.org/10.1177/1475240906065589

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191–215. https://doi.org/10.1037/0033-295X.84.2.191

Bandura, A. (1997). *Self-efficacy: The exercise of control.* W. H. Freeman.

Black, J. S. (1988). Work role transitions: A study of American expatriate managers in Japan. *Journal of International Business Studies, 19*(2), 277–294. https://doi.org/10.1057/palgrave.jibs.8490383

Chemers, M. M., Hu, L.-t., & Garcia, B. F. (2001). Academic self-efficacy and first-year college student performance and adjustment. *Journal of Educational Psychology, 93*(1), 55–64. https://doi.org/10.1037/0022-0663.93.1.55

Chen, S. X. (2010). Psychosocial processes underlying cross-cultural adjustment: A self-determination perspective. *Journal of Counseling Psychology, 57*(3), 299–310. https://doi.org/10.1037/a0019871

Jones, R. A. (1986). *Research methods in the social and behavioral sciences.* Sinauer Associates.

Kayani, S., Aajiz, N. M., Raza, K. K., Kayani, S., & Biasutti, M. (2023). Cognitive and interpersonal factors affecting social adjustment of university students in Pakistan. *International Journal of Environmental Research and Public Health, 20*(1), Article 655. https://doi.org/10.3390/ijerph20010655

Komarraju, M., & Nadler, D. R. (2013). Self-efficacy and academic achievement: Why do implicit beliefs, goals, and effort regulation matter? *Learning and Individual Differences, 25,* 67–72. https://doi.org/10.1016/j.lindif.2013.01.005

Malik, A. I., Batool, R., & Tabassum, S. (2024). Academic self-efficacy, academic motivation and coping skills in academia: A cross-sectional exploration. *Pakistan Journal of Humanities and Social Sciences, 12*(1), 573–580. https://doi.org/10.52131/pjhss.2024.v12i1.2047

Martin, A. J., Colmar, S., Davey, L., & Marsh, H. W. (2010). Longitudinal modelling of academic buoyancy and motivation: Do the '5Cs' hold up over time? *British Journal of Educational Psychology, 80*(3), 473–496. https://doi.org/10.1348/000709910X486376

Martin, A. J., & Marsh, H. W. (2008). Academic buoyancy: Toward an understanding of students' everyday academic resilience. *Journal of School Psychology, 46*(1), 53–83. https://doi.org/10.1016/j.jsp.2007.01.002

Misra, R., & Castillo, L. G. (2004). Academic stress among college students: Comparison of American and international students. *International Journal of Stress Management, 11*(2), 132–148. https://doi.org/10.1037/1072-5245.11.2.132

Poyrazli, S., & Duru, E. (2011). Differences in perceived discrimination, social connectedness, and adjustment among international students. *International Journal of Intercultural Relations, 37*(5), 719–729. https://doi.org/10.1016/j.ijintrel.2013.09.001

Putwain, D., Connors, L., Symes, W., & Douglas-Osborn, E. (2012). Is academic buoyancy anything more than adaptive coping? *Anxiety, Stress & Coping, 25*(1), 21–37. https://doi.org /10.1080/10615806.2011.582459

Rashid, D. S., Khurshid, M., & Saeed, H. (2021). Role of self-efficacy as a moderator in the relationship of psychological distress, psychosocial adjustment and educational adjustment among university students. *Journal of Professional & Applied Psychology, 2*(2), 134–146. https://doi.org/10.52053/jpap.v2i2.69

Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright, & M. Johnston (Eds.), *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35–37). NFER-NELSON.

Smith, R. A., & Khawaja, N. G. (2011). A review of the acculturation experiences of international students. *International Journal of Intercultural Relations, 35*(6), 699–713. https://doi.org/10.1016/j.ijintrel.2011.08.004

Ward, C., & Kennedy, A. (1999). The measurement of sociocultural adaptation. *International Journal of Intercultural Relations, 23*(4), 659–677. https://doi.org/10.1016/S0147-1767(99)00014-0

Yiming, Y., Shi, B., Alghamdi, A. A., Kayani, S., & Biasutti, M. (2023). Social support and self-efficacy as mediators between internal locus of control and adolescents' physical activity. *Sustainability, 15*(7), Article 5662. https://doi.org/10.3390/su15075662

Zimmerman, B. J. (2000). Self-efficacy: An essential mediator of self-regulated learning. In P. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 13–39). Academic Press.