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Impact of Psychological Capital on Academic Adjustment Among International Students From Gulf Corporation Council Countries

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The experience of international students adjusting to academic life in foreign countries has been widely discussed in Western countries. However, there is a dearth of empirical research that investigates the impact of psychological factors like psychological capital including efficiency, hope, reliance, and optimism, on the academic adjustment of international students in the Gulf Corporation Council (GCC) countries. This study addresses this research gap to examine the issue of academic adjustment in the GCC countries with modesty, yet significant results. Additionally, the study is unique in its exploration of the moderating effect of psychological capital on academic adjustment through the creation of an interaction term. A cross-sectional survey was administered to 303 international students from six countries, and the study employed multinomial logistic regression and marginal effects analyses. The findings indicate a statistically significant positive impact of psychological factors on the academic adjustment of international students in the GCC countries. Moreover, the coefficients of the interaction terms suggest that the impact of psychological capital on academic adjustment is language dependent. This paper provides valuable insights for policymakers, educational ministries of the GCC, and scholars researching international student adjustment.

Keywords. International student adjustment, psychological capital, academic achievement, Gulf Corporation Council (GCC), empirical research

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The culture of Arabian Gulf countries is intricate and encompasses a combination of religious and cultural values (Cao et al., 2021; Jubran et al., 2020; Kim & Cronley, 2020; Singh & Jack, 2022). For international students, adapting to a new country, culture, and education system poses a formidable challenge. Intercultural academic adjustment is the process of learning to adapt, modify, or change one's behavior or attitudes to cultural differences that have a psychological impact (Hazan-Liran & Miller, 2022; Koo et al., 2021; Sarif & Ngasainao, 2021).

Various studies have revealed that when international students interact socially with locals and employ psychological capital, they can acquire skills and behaviors to help them adjust to their new environment (Al Murshidi, 2014; Hu et al., 2020; Oppong Asante et al., 2022). However, international students face a host of obstacles, including differences in academic systems, academic pressure, cultural disparities, language barriers, and inadequate psychological capital (Almubark et al., 2022; Sam et al., 2013; Singh & Jack, 2022). According to several studies, language barriers and cognitive factors significantly affect the academic performance of international students (Ku et al., 2008). Furthermore, anxiety resulting from speaking English as a Second Language (ESL) in front of others can limit international students' ability to socialize and participate in class discussions (Cao & Meng, 2021; Chaiyasat, 2020).

Some Gulf nations, such as the UAE, are actively recruiting foreign students to bolster economic growth outside the oil sector and develop a competitive knowledge-based economy (Almubark et al., 2022). UAE has prioritized education for a long time and has attracted a substantial number of students from neighboring countries such as India, Pakistan, Iran, UK, and US. This priority is reflected in the country's current strategic education plan for 2017-2021, which aims to achieve a 98 percent upper-secondary graduation rate (Alrumaidhi, 2022; Kevin, 2018; Pavan, 2020). Similarly, other oil-rich Persian Gulf monarchies like Qatar, Kuwait, Oman, and Saudi Arabia are also attracting a large number of international students and believe that psychological capital can help them in academic adjustment (Binsahl et al., 2020).

The current study aims to investigate the relationship between psychological capital and academic adjustment of international students in European universities. This study is necessary as some international students possess psychological capital that enables them to cope with the challenges of academic life, while others struggle and experience stress, hopelessness, and a sense of irrelevance (Alrumaidhi, 2022; Gerdes & Mallinckrodt, 1994; Pavan, 2020). The

high attrition rates of students in higher education institutions are a significant concern for university and college administrations, with some studies reporting that more than 40% of college entrants do not graduate, and 75% of these students drop out within the first two years of their studies (Gerdes & Mallinckordt, 1994). Thus, there is a gap in research that needs to be addressed by investigating the role of psychological capital in the academic adjustment of international students. The findings of this study could potentially contribute to the development of interventions to improve the academic outcomes of international students and reduce attrition rates (Gerdes & Mallinckordt, 1994).

The present study differs from prior research as it is focused on the Gulf Cooperation Council (GCC) countries and examines the influence of psychological capital on academic adjustment while considering the moderating effect of language barriers (Chaiyasat, 2020; Hazan-Liran & Miller, 2022; Kim et al., 2020). Although the challenges of adjusting to a new culture have been studied extensively in non-Arab countries, there is a lack of empirical research on the impact of psychological capital and language barriers on the academic adjustment of international students in GCC countries (Alrumaidhi, 2022). Despite its modest scope, the present study can provide significant insights into the issue of academic adjustment.

According to Hazan-Liran and Miller (2022), student academic adjustment can be measured by four domains, including institutional adjustment, personal emotional adjustment, academic achievements, and social adjustment. Academic achievement, including satisfactory grades, is indicative of academic adjustment (Chaiyasat, 2020; El-Maamiry, 2020). Social adjustment and institutional adjustment represent students' engagement with their study environment and their relationship with the academy, respectively. Personal emotional adjustment reflects the students' psychological and physical conditions, self-perception, and ability to cope with study-related stress and anxiety (Chaiyasat, 2020; Hazan-Liran & Miller, 2022).

Nasir (2012) conducted a study indicating that international students face various adjustment issues in their new social, psychological, and academic surroundings. Similarly, Church (1982) investigated the subject in his research on Sojourner adjustment, and Hazan-Liran and Miller (2022) studied international students' strategies for well-being, both of which found that academic difficulties experienced by international students lead to motivational and social or emotional problems, as well as new social regulations that negatively impact academic success.

Multiple researchers, including Cao et al. (2021), Tinto (1993), and Chong et al. (2009) have observed that a better adaptation to a foreign environment has a positive impact on international students' academic success. Adapting to a new learning environment in a foreign country is often challenging for international students, as it involves general life adjustments, sociocultural adjustments, personal-psychological adjustments, and academic adjustments (Lin & Yi, 1997; Tseng & Newton, 2002). As a result, students face difficulties achieving their goals and expectations, with psychological factors posing hurdles in academic adjustment (Anderson & Koc, 2016; Kanu, 2008; Hu et al., 2020; Oppong Asante et al., 2022).

Psychological capital, which encompasses self-efficacy, optimism, hope, and resilience, is a crucial factor in an individual's positive psychological development (Luthans, 2002; Luthans et al., 2004; Luthans & Youssef, 2004; Singh & Jack, 2022). Self-efficacy, optimism, hope, and resilience, represent psychological capital (Avey et al., 2010; Liran & Miller, 2019; Luthans et al., 2007; Pavan, 2020). To evaluate the impact of psychological capital on academic adjustment, researchers can consider students' grade point averages (GPAs) (Luthans et al., 2007).

Theoretical Framework

According to Walberg's theory of academic performance, academic achievement is influenced by various factors such as motivation, study habits, and learning environment (as cited in Luthans, 2002). These factors can be linked to psychological capital, which represents an individual's positive level of psychological development. Efficiency, hope, reliance, and optimism are important components of psychological capital, and they can impact academic adjustment. Efficiency refers to a student's belief in their ability to perform a task effectively, while hope relates to their expectation of achieving their goals (Luthans et al., 2007). Reliance and optimism also play crucial roles in psychological capital, as they involve a student's ability to cope with challenges and setbacks and maintain a positive outlook (Luthans & Youssef, 2004). In the context of international students in the Arab Gulf States in Arabian Gulf, psychological factors can affect academic adjustment, as observed by Oppong Asante et al. (2022). However, by developing efficiency, hope, reliance, and optimism, these students may be better equipped to cope with challenges and achieve academic success.

Walberg's theory of academic performance proposes that academic achievement is influenced by various factors, including the

learning environment. Language of instruction is an important aspect of the learning environment, as it can affect students' ability to understand and engage with course material. According to a study by Hu et al. (2020), language proficiency is a significant factor in the academic adjustment of international students.

Psychological capital, which includes efficiency, hope, reliance, and optimism, can also impact academic adjustment. A study by Luthans et al. (2007) found that psychological capital had a positive impact on academic achievement among Chinese international students studying in the United States. However, it is possible that the impact of psychological capital on academic adjustment may vary depending on the language of instruction. For example, a study by Park and Kim (2019) found that Korean international students studying in the United States experienced greater academic stress when courses were taught in English, as opposed to their native Korean language.

In summary, Walberg's theory of academic performance offers a theoretical framework for understanding how psychological factors such as efficiency, hope, reliance, and optimism can impact the academic adjustment of international students in the Arab Gulf States in the Arabian Gulf. By building their psychological capital, these students may be better equipped to adapt to the challenges of their new academic environment and achieve academic success (Luthans et al., 2007; Luthans & Youssef, 2004; Oppong Asante et al., 2022). Walberg's theory of academic performance can provide a useful framework for exploring the relationship between psychological capital and academic adjustment in the context of different languages of instruction. By examining the impact of psychological capital on academic adjustment in different language contexts, we can gain a better understanding of how language proficiency may influence the effectiveness of psychological capital as a tool for academic success. The objective of present research was to see the role of psychological capital (i.e., efficiency, hope, reliance, and optimism) on the academic adjustment of international students from the Gulf Corporation Council Countries.

Method

Sample

The study aimed to collect data from international students who were studying in Gulf Cooperation Council (GCC) countries. The sample size for the study was determined using Morgan's criteria (Krejcie & Morgan, 1970) which provides guidelines for selecting a representative sample size based on the population size, level of

accuracy desired, and level of confidence required in the results. In this case, a sample size of 303 was chosen based on these criteria to ensure that the data collected would be sufficient to draw meaningful conclusions about the research questions being investigated. The sample is unique in its attribute as they were all foreign students for the local community and were trying to adjust in the Gulf countries to pursue their academic careers. The list of students was provided by the admission office of schools. For simple random sampling, every sixth student was selected to fill out the survey. Sample selection detail is given in Table 1.

Table 1

Distribution of Participants by GC Country and University (N = 303)

Country	University/Level of Degree	Number of Respondents	Percent
Bahrain	Arabian Gulf University (Bachelor)	4	4.290
	AMA International University of Bahrain (Bachelor)	9	
Kuwait	University of Glasgow (Bachelor+ 1 master student)	7	8.580
	The American School of Kuwait (Pre-K-12 etc)	19	
Saudi Arabia	Pakistan International School Jeddah (class X-XII)	47	16.831
	The British International School, Riyadh (Year 10 to 13 and foundation students)	32	
	Alfaisal University	5	
	Al Yamamah University (Bachelor)	4	
Qatar	Qatar University (Bachelor)	3	17.821
	Pakistan International School Qatar (Class X, X,I, and XII)	51	
Oman	Nizwa University (Bachelor)	7	13.861
	Pakistan School (Branch Nizwa, Slala, Muscat, Sohar) (Class X, XI, and XII)	71	
	Indian School (Branch Muscat & Nizwa) (Class VIII to XII)	35	
United Arab Emirate	University of Birmingham Dubai (Bachelor + Others)	6	2.970
	United Arab Emirates University (Bachelor + Others)	3	
Total		303	

Instruments

Psychological Capital

In this study, a modified Hebrew version of the Psychological Capital instrument by Luthans et al. (2007) was used, which has been previously shown to have high reliability (Liran & Miller, 2019). The questionnaire consists of 24 items designed to measure self-efficacy, hope, optimism, and resilience in relation to academic outcomes. The scale ranged from 0 (*strongly disagree*) to 2 (*strongly agree*). Items 1 to 6 measured self-efficacy, which relates to the respondent's self-confidence in achieving long-term goals. Items 7 to 12 assessed hope, which measured the respondent's goal-setting abilities. Items 13 to 18 measured optimism, which assessed how respondents deal with uncertainty. Finally, items 19 to 24 measured resilience, which evaluated the respondent's ability to handle academic challenges.

Academic Adjustment Instrument

In this study, the Academic Adjustment instrument developed by Baker and Siryk (1986) was used to measure academic achievement, social skills, personal and emotional well-being, and satisfaction in academic institutions. The instrument was modified for use in the Gulf region, including Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates, and was found to be highly reliable (Liran et al., 2019). Several questions were revised and reversed, and items 1-6 measured academic achievement, assessing the difficulties students face in academic-related activities. Items 7-14 assessed social skills and inter-connectedness with other students, while items 15-21 measured personal and emotional well-being, including stress, moods, and emotions. Items 22-28 evaluated students' satisfaction with their academic institution. In addition, four questions were asked in English to assess self-rated proficiency in reading, writing, speaking, and listening.

Procedure

To collect the data, a survey was administered to students using a simple random sampling technique. The sample consisted of students from different grades in schools in the GCC. The list of students was provided by the admission office of schools. After taking their consent students were instructed to fill the questionnaire. Following the simple random sampling technique, every sixth student was selected to fill out the survey. If a student was absent, the next student on the list was

selected until a student who was present was reached. For example, if student number 6 was absent, the 7th student was chosen. The survey was administered to students through a paper copy survey. At the end they were thanked for their cooperation during the data collection.

Results

Demographic Characteristics of Sample

Information about students' demographic characteristics including age, their duration of stay at GCCU countries, family size and their scholarship status are presented in Table 2.

Table 2

Demographic Characteristics of Sample of Study

Variables	*M*	*SD*	Minimum	Maximum
Age	16.066	2.448	11	25
Duration	.260	0.672	1	4
family size	3.488	1.214	1	6
Scholarship	.676	.468	50	253

Respondents' ages ranged from 11 to 25 years, with those who had newly enrolled in an educational institute coded as "1" and maximum enrollment duration of 4 years. The reported minimum family size for international students was 1, and the maximum was 6. Fifty students were on scholarship, while the remaining students were self-financed.

Reliability and Multicollinearity Analysis

Before conducting the regression analysis, SPSS was used to perform Cronbach's α and multicollinearity tests. Cronbach's α was used to assess the consistency of the items in the following variables: academic adjustment (.82), efficiency (.71), hope, reliance (.71), optimism (.71), and language (.97). According to Hair et al. (2010), the coefficient value should be above 0.6 to ensure the reliability of the variables in the regression analysis.

Multicollinearity tests with VIF value of more than 10 indicates that variables are not suitable for further investigation as they overlap. The results presented in Table 3 indicate that there are no problems with multicollinearity.

Table 3

Muticollinearity tests with VIF Values for Study Variables

Variables	VIF
Efficiency	1.12
Hope	1.03
Reliance	1.14
Optimism	1.09
Language	1.11

Independence of Irrelevant Alternative (IIA) Assumptions

It is necessary to check if the IIA (Independence of Irrelevant Alternatives) assumption is satisfied before applying the multinomial logistic regression (MNL). The IIA assumption is considered satisfactory when the odds ratio of 1 divided by the odds ratio of 2 equals one (1/2 ÷ 1/2 = 1). Conversely, the IIA assumption is not satisfactory when (1/2 ÷ 1/4 ≠ 1) (Cheng & Long, 2007). In the present study, the IIA assumption is not violated.

Table 4

Hausman Test to Check Independence of Irrelevant Alternative Assumptions

Omitted	chi-2	*df*	*p* > chi2	Evidence
Doesn't suit	-0.319	4	0.000	Accept Ho
Sometimes suit	1.93	4	1.549	Accept Ho
Fully suits	0.274	4	0.982	Accept Ho

The Independence of Irrelevant Alternative (IIA) assumption is satisfactory for running the regression, as indicated by the Hausman test in Table 4. It is argued by Cheng and Long (2007), Freese and Long (2000), and Dahlberg and Eklöf (2003) that a negative chi-square value does not necessarily mean that the IIA assumptions are violated. Furthermore, all categories of academic adjustment, psychological capital, and language in the model fulfill the condition of the IIA assumption.

Multinomial Logistic Regression Analysis

To see the impact of change in the outcome variable that is academic adjustment Multinomial logistic regression analysis was performed and the results are presented below:

Table 5

Multinomial Logistic Regression for Study Variables

Model 1	Sometimes suit relative to Doesn't suit		Fully suit relative to Doesn't suit	
Variables	*B*	S.E	*B*	S.E
Efficiency	.570	.406	.883	.167
Hope	.379	.140	.014	.060
Reliance	.540	.133	.073	.054
Optimism	2.851	.172	.332	.0571
Language	.798	.2771	1.426	.093
PsyCap* L	.241	.146	.368	.0630
Log of likelihood = -2618.6154		Pseudo R^2 =0.1280		
Probe > chi2 = 0.0000				

Note. *, **, and*** shows the coefficient of the variable is significant at the ten percent, five percent, and one percent, happy is the base outcome.

The Pseudo R2 value of 0.1280 and Log likelihood value of -2618.6154 indicate that the fitness of the model is satisfactory (Cheng & Long, 2007).

Table 6

Marginal Effect of the Multinomial Logistic Regression for Study Variables

Variables	Doesn't Suit	Sometimes Suits	Fully Suits
Efficiency	.006***	.001**	.007**
	(.001)	(.014)	(.014)
Hope	-.007	.014***	.022***
	(.001)	(.012)	(.013)
Reliance	.033	.065	.099***
	(.004)	(.013)	(.013)
Optimism	-.003	0.343	0.3472
	(.003)	(.021)	(.022)
Language	-.300	.087	.086
	(.001)	(.014)	(.014)

Note. *, ** and*** shows the coefficient of the variable is significant at the ten percent, five percent and one percent.

To see the impact of change in explanatory vvariable i.e., academic adjustment the values of marginal effect of multinomial logistic regression is reported in Table 6. Marginal effects are a crucial measure in assessing the probability of selection1 and the rate of change. It is essential to evaluate all outcomes and predict the marginal change in all outcomes. The marginal effects change with a point of computation of any predictor reflected in the values presented in parentheses. It can be seen in the results that the marginal effect is positive (Cheng & Long, 2007).

Discussion

Efficiency is an important factor that positively correlates with academic achievement. This indicates that students who possess high levels of efficiency are able to successfully analyze and solve long-term study-related problems, leading to academic success. Additionally, such students are active contributors to discussions related to their field of study and enjoy sharing their knowledge with their classmates. These students are also more likely to feel satisfied with their academic progress. The findings of the present study are consistent with Hazan-Liran and Miller (2022) and Oppong Asante et al. (2022).

In addition, hope is another important variable that has a statistically significant positive correlation with academic adjustment. This indicates that students who see themselves as successful in their studies and strive to achieve their academic goals tend to adjust better in academic settings. This finding is consistent with Sarif and Ngasainao (2021). Further, Geremias et al. (2022) found that hope plays a significant role in helping students adjust to new cultural environments and achieve academic success. Taken together, the findings of the present study suggest that students who possess high levels of efficiency and hope are more likely to adjust better in academic settings and achieve academic success. These findings support the importance of these variables in promoting academic adjustment and success among students.

The present study found that reliance and optimism have a positive relationship with academic adjustment. This means that students can handle study-related problems calmly and recover quickly from setbacks. Additionally, students are satisfied with the logistical services provided by their institutes. This finding is consistent with previous researches (Aminullah et al., 2022; Carmona-Halty et al., 2022; Raza et al., 2020).

Furthermore, language proficiency is also important for academic adjustment. The study found that students who can speak English are more likely to achieve academic success. The interaction term analysis also showed a positive relationship between psychological capital and academic adjustment, depending on language proficiency. These findings are in line with previous studies (Singh & Jack, 2022) and Matte-Landry et al. (2020). Hope is a significant factor for academic adjustment. The author explains that students who see themselves as successful in their studies and are striving to achieve their academic goals are more likely to have better academic adjustment. The author

cites two previous studies, Sarif and Ngasainao (2021) and Geremias et al. (2022), to support this finding.

This study then goes on to discuss the broader implications of this study's findings. The author suggests that language proficiency, psychological capital, and hope are all important factors for academic adjustment among students. The author cites two previous studies, Singh and Jack (2022) and Matte-Landry et al. (2020), to support the finding that language proficiency is an important factor for academic adjustment. The author also cites two previous studies, Aminullah et al. (2022) and Carmona-Halty et al. (2022) support the finding that psychological capital is an important factor for academic adjustment.

The study's findings on marginal effects show that certain factors have a significant impact on academic adjustment. Specifically, if a student's efficiency increases by one from its mean value, the probability of not adjusting, sometimes adjusting, and fully adjusting is expected to increase by 0.06%, 0.01%, and 0.07%, respectively. On the other hand, an increase in hope is found to have a negative effect on the probability of not adjusting, leading to a decrease of 0.7%, while the probability of sometimes adjusting and fully adjusting is expected to increase by 0.14% and 2.2%, respectively. Additionally, an increase in reliance from its mean value is expected to increase the probability of sometimes adjusting and fully adjusting by 6.5% and 9.9%, respectively. Meanwhile, an increase in optimism by 1% is expected to decrease the probability of not adjusting by 0.3%, while the probability of sometimes adjusting and fully adjusting is expected to increase by 0.3%. Overall, this paragraph presents a clear and coherent explanation of the study's findings, using previous research to support and contextualize these findings. The author effectively demonstrates how the study's findings contribute to our understanding of academic adjustment among students.

Conclusion

In conclusion, this study has revealed that language proficiency is a crucial factor in promoting academic adjustment among international students studying in the GCC. The findings indicate that students who can speak English are more likely to adjust fully or sometimes, and less likely to struggle with adjustment issues. These results are consistent with the previous research that underlined the significance of assessing all outcomes to predict marginal changes using marginal effects in MNL analysis, as exemplified by Cheng and Long (2007). The research aimed to investigate the role of psychological capital in academic adjustment through language, and

the results revealed that both language barriers and psychological capital have a significant impact on academic adjustment. Furthermore, the effect of psychological capital on academic adjustment was found to depend on language proficiency. Overall, this study highlights the importance of language proficiency in academic adjustment, and its findings have significant implications for policymakers, educators, and international students who seek to improve their academic performance and experience in the Gulf States.

Limitations and Suggestions

One of the main limitations of this study is its relatively small sample size, which was constrained by time and financial resources. However, the sample size met the criteria for selecting a satisfactory sample size as recommended by Krejcie and Morgan (1970). To improve the reliability and power of future studies, researchers could consider collecting larger sample sizes. Additionally, while the study included several important factors in academic adjustment, such as language proficiency, psychological capital, and hope, it is important to acknowledge that other factors may also contribute to academic adjustments, such as personality traits, family support, and cultural background. Therefore, future studies could explore these additional factors to gain a more comprehensive understanding of academic adjustment among students. Finally, while this study included a diverse sample of students from six different countries, it is important to consider the generalizability of the findings to other populations. Future studies could replicate this research with larger and more diverse samples to examine the generalizability of the findings across different cultural and linguistic backgrounds.

Implications

The implications of this research are significant for policymakers, educational ministries of the GCC, and scholars researching international student adjustment. The study's findings reveal the importance of psychological factors, including efficiency, hope, reliance, and optimism, in facilitating academic adjustment for international students in the GCC countries. This research contributes to the understanding of academic adjustment in the GCC countries and provides important insights for policymakers and education ministries to support international students' academic success. Additionally, the study's exploration of the moderating effect of psychological capital on academic adjustment through the creation of an interaction term

provides a unique and valuable contribution to the existing literature. The results of this study can be used to develop programs and policies to enhance the academic adjustment of international students in the GCC countries, which could ultimately lead to higher academic achievement and greater success in their future careers.

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