

The Successful Transition to University: Socioeconomic and Personal Determinants Affecting First-Year Undergraduates

Ahmed Ramadan Khatiry^{1*} & Sahar Ewais Abdallah²

Abstract

The impact of socioeconomic status on the successful transition to academic life for college students has been extensively analyzed. This study focuses on exploring personal and socioeconomic variables that contribute to the successful transition of Arab students to college study. The study delves into the examination of family income, students' expatriation, parental academic support, family residence, pre-entry skills, and study challenges, elucidating their interrelationships and their collective impact on the success of students in their first year of college study. By considering mediation and moderation effects, the study constructs and investigates a structural model comprising 6 hypotheses that elucidate the influencing indicators on college students' academic achievements. The study is grounded in a sample of 1267 first-year students at an Egyptian university. Through measurement and structural analyses, the model revealed support for five hypotheses, while one hypothesis was rejected. Regarding the impact of parents' academic assistance on students' success in the first year of college, the findings reveal no mediating effect of study challenges in this relationship. Nevertheless, the study uncovered a complementary partial mediating role of students' skills in the context of college admission. When examining the impact of family income on students' success, the results indicated a full mediation effect of study challenges and a complementary partial mediating role of students' pre-entry skills. Furthermore, the study identified two suggested moderation effects related to students' expatriation and family residence, highlighting their role in the mutual influences among family income, study challenges, and students' success. The research findings led to the discussion of several implications, and recommendations were put forward, emphasizing the importance of academic advising programs for economically and culturally disadvantaged students.

Keywords: *Disadvantaged students, first-year students, successful transition to college, socioeconomic status.*

Introduction

Numerous pedagogical and psychological theories have forecasted the motivational and behavioral indicators that contribute to students' adjustment at the university level. The widespread social and economic changes globally have directly impacted the academic and non-academic factors influencing student success. Additionally, individual or family characteristics play a significant

^{1*} Corresponding Author, Foundations of Education Department, Faculty of Education, Fayoum University, Egypt; Educational Studies Department, Rustaq College of Education, University of Technology and Applied Sciences, Sultanate of Oman. ahmedkhatiry@fayoum.edu.eg & ahmed.khatiry@utas.edu.om

² Foundations of Education Department, Faculty of Education, Fayoum University, Egypt. sea00@fayoum.edu.eg

role in determining the level of students' achievements. Various admission policies, such as pre-selection based on ability and students' core competencies, have been implemented to enhance the success rate of first-year college students (Morlaix & Suchaut, 2014). Nevertheless, the successful transition of students is frequently a challenging experience, and dropout rates during the first year of college study are globally high compared to subsequent years (Dorta-Guerra et al., 2019; van Rooij et al., 2018). Upcraft et al. (2005) recommended that first-year programs should prioritize the personal and emotional development of students by incorporating both cognitive and social aspects that complement each other.

In this context, numerous researchers have concluded that it is feasible to discern the rates of high or low academic achievement among college students based on factors such as family background, demographic variables, and social conditions (Swing & Skipper, 2007). Similarly, Demetriou and Schmitz-Sciborski (2011) explored various variables, including social engagement, ethnicity, family income, parents' socio-educational level, and the distance of hometown from college, as direct or indirect factors influencing university students' retention and academic success. In a series of studies, Tinto (1975; 1993) posited a model of intertwined effects, providing a theoretical framework to comprehend the factors influencing student retention or dropout from college. The model focused on investigating social and academic integration as central components influencing the academic success of college students.

In 1993, Tinto's model underwent further development by encompassing a broad spectrum of pre-entry qualities and experiences that influence students' educational expectations, goals, and commitments as they transition through university life. Similarly, the social capital theory has been recognized as a valuable framework for analyzing the experiences of college students. Conceptually, it refers to the value of a relationship that provides support and assistance in specific social situations (Bourdieu, 1977). Social capital encompasses both physical and intangible social qualities linked to the concepts of economic and social capital that an individual already possesses, as well as the features of a group that they strive to maintain (Cote & Levine, 2002; Matthys & Perlzweig, 2013). The findings of a study conducted by Dumais and Ward (2010), which explored the impacts of the cultural capital of first-generation college students on their academic success, indicated that family capital and parents' assistance play a significant role in students' retention in college academic life. The supported perspective of this correlation argues that students from high educational levels possess a distinct advantage, especially over first-generation college students,

in navigating and understanding the culture of higher education (Ricks, 2016). Similarly, certain researchers have concluded that while many studies indicate that students from low socioeconomic backgrounds are less likely to complete their college studies, the interpretation of the underlying causes of this impact remains unclear (Goldrick-Rab, 2010).

In the Arab context, Kronfol et al. (2018) concluded in their investigation of psychiatric difficulties among college students in two Arab countries that academic challenges during college life are frequent and more critical in developing countries. In these regions, students often encounter larger social challenges and lack the required resources and services. In an examination of the relationship between socioeconomic factors and psychological impacts on Egyptian undergraduate students, Ibrahim et al. (2012) observed elevated rates of depressive symptoms.

The study highlighted the significant role of parents' occupation, particularly among economically disadvantaged students from low socioeconomic backgrounds. A recent study in the UAE has explored the impact of financial constraints on university students, finding that academic achievement improves when parents prioritize providing an optimal study environment despite financial limitations (Dev et al., 2023). Evidently, the socioeconomic factors impacting students' success, particularly in their initial college years, have not been extensively examined within the context of Arab higher education institutions. The literature has generally explored the impact of certain social conditions on university study challenges, lacking in-depth investigation into specific socioeconomic variables, such as parents' academic assistance, students' skills, expatriation, and family conditions, including income and residence.

This study primarily aims to analyze the mediation and moderation effects among variables, including parents' academic help, students' skills, students' expatriation, and family conditions (income or residence), on students' success in university life. This contribution seeks to address the literature gap, particularly within Arab contexts. The study also seeks to investigate the reduction of study challenges among Arab students, particularly in their first years of university and identify the obstacles or barriers impeding their success in colleges. The study extends previous research that employed Tinto's model of college students' departure (Tinto, 1975; 1993), Holland's theory of patterns of college student success, and the cultural mismatch theory. It specifically examines the moderating role of certain socioeconomic variables on student retention or dropout from college.

Theoretical Framework

Cultural integration, denoting the assimilation into academic culture, is a pivotal process influencing a successful transition to university and molding the acquisition of a new identity. Numerous studies suggest that students' capacity to adapt positively to university life and studies is perceived to be influenced by their characteristics or skills at the beginning of their university education, encompassing various personal and educational indicators (Morlaix & Suchaut, 2014). Moreover, several psychological studies underscore that first-year students exhibit elevated levels of stress, depression, and a sense of vulnerability to failure. These challenges may stem from encountering diverse academic difficulties and experiencing feelings of incompetence (Swing & Skipper, 2007; Keup & Stolzenberg, 2004). Similarly, McMillan (2013) asserted that students' emotions constitute a natural aspect of their university transition experience, necessitating a roadmap and guidance. The study found that students with fewer financial resources experienced stress related to living costs. Even those from financially stable families felt that the lack of budgeting experience was a source of stress. Certain studies note a surprising high level of depression among college students, revealing an inverse relationship between depression and the socioeconomic status of students (Lorant et al., 2006; Archer & Ross, 2003).

Additionally, economically disadvantaged students face challenges in managing college responsibilities, effectively engaging and communicating with faculty members, and understanding their expectations (Collier & Morgan, 2008; Kim & Sax, 2009). These students are less likely to participate in extracurricular groups, pursue research opportunities, and contribute to specific learning experiences (Wilbur & Roscigno, 2016). However, other study findings reveal that a deficient cultural environment can also offer advantages, including enhanced problem-solving abilities and exposure to cultural diversity (Tian & Yu, 2021). Consequently, students from lower socio-economic backgrounds may tend to experience isolation within university student populations.

Under certain cultural conditions, students from lower socio-economic backgrounds are less likely to be socially and academically engaged during their college studies (Lohfink & Paulsen, 2005; Pascarella et al., 2004). Likewise, Ibrahim et al. (2012) noted that Arab students with higher family incomes are less prone to experiencing elevated rates of depressive symptoms during their university studies. Numerous studies concentrate on the socio-educational level of parents, parental encouragement, and their academic awareness as significant indicators of first-year

students' success in colleges (Brouwer et al., 2016; Gil-Galván & Martín-Espinosa, 2023). In close connection with this factor, numerous investigations exploring the family context and students' educational and socioeconomic success have started incorporating empirical evidence. These studies suggest that, beyond parents, other family members such as cousins, aunts, and grandparents also influence students' achievements (Møllegaard & Jaeger, 2015). Considering the number of family members enrolled in college, Dumais and Ward (2010) suggested that first-generation students might be less prepared for the requirements and expectations of a smooth transition to university life compared to their counterparts. Previous studies yield mixed results, indicating that dropout rates have increased among first-generation students when compared with second-generation students (Ishitani, 2006; Stage & Hossler, 2000).

Regarding students' expatriation as an indicator of the successful transition to university life, some studies suggest that the level of soft independence is a significant variable for a successful academic experience. However, other studies express uncertainty about embracing this independence, citing difficulties in maintaining interdependent social interactions. Possibly, for some students, confronting soft independence represents a dramatic shift from their previous experience of rugged independence in their hometown with family (Covarrubias et al., 2019). In the Arab context, this variable might have a more substantial impact, given the strong social relationships between Arab students (at this age level) and their families from a psychological perspective. In a recent study, Algrgawi (2023) identified three dimensions of the negative impact of expatriation on students' academic achievement: self-accountability for their behavior, adapting to a completely new cultural setting, and experiencing an inner feeling of nostalgia for the family. Consequently, in a series of studies, the cultural mismatch theory has been utilized to investigate how social class differences among college students persist throughout their academic journey.

Broadly, the cultural mismatch theory posits that disparity arises when there is a lack of alignment between cultural norms in mainstream institutions and social groups that are marginalized within those organizations (Stephens & Townsend, 2015). In the educational context, Stephens et al. (2012) investigated how a cultural match or mismatch between academic life norms at university and students' norms influences their psychological experience in academic settings. They concluded that the prevalent independent representation of academic culture at university contributed to a social class gap in students' interaction. Phillips et al. (2020) asserted that early cultural mismatch in the first year of college can result in deficiencies in students' academic

performance. Furthermore, first-generation students tend to endorse more interdependent cultural norms than their peers, potentially leading to a diminished subjective sense of adjustment in college life later on.

The variables and conditions influencing the successful academic experience of college students have been explored through various effects models. Some investigations have focused on social variables, such as Tinto's (1975; 1993) model, while others have considered the psychological and sociological predispositions and behaviors of college students (Holland, 1997; Smart et al., 2006). In their psychosocial inquiry, Krumrei-Mancuso et al. (2013) delved into the predictors of first-year college students' success and examined the mediating role of various factors, including academic self-efficacy, organizational skills, students' attention to study, stress and time management skills, involvement in college activities, emotional satisfaction with academics, and class communication. Recently, Raza et al. (2021) concluded that there are mediation effects of academic adjustment on the relationship between college students' success and psychological, motivational, and behavioral factors.

Method

Research Design

As previously discussed in this study, numerous investigations have demonstrated that various social, demographic, personal, and economic variables significantly influence the likelihood of academic success among first-year college students. The nature of these variables underscores a complex impact on students' achievement and progress in academic life. As extensively explored, the Tinto model and cultural mismatch theory have furnished predictors of socioeconomic variables that exert a significant impact on college students' achievements and academic abilities. Considering the Arab culture, the present study proposes a model of mediation and moderation effects among some socioeconomic, demographic, and personal variables of first-year college students. The study variables can be outlined as follows:

- **Socioeconomic Variables:** The study utilized self-reported data for social indicators such as family income, family residence, students' expatriation, and parents' academic help level. It is noteworthy that the validation of self-reported data can be reliable, as questions are designed to avoid embarrassment or violation of students' confidentiality (Kuh, 2010). A scale for family income was employed to categorize the economic level of Egyptian

society into five levels according to the World Bank household report (World Bank, 2022). The scale included lower income level (< 3000 Egyptian Pounds, EP), Upper Lower (< 6000 EP), lower middle (< 9000 EP), upper middle (< 12000 EP), and upper class (> 12000 EP to high level). Furthermore, parents' academic help level was measured using a 5-Likert scale of frequency, ranging from never to always.

- **Academic Success:** The academic grading system (GPA) of higher education institutions in Egypt employs a worded grade for courses, including excellent, very good, good, pass with one or two courses, and fail. The study utilized the same grading scale to measure the academic achievements of college courses that have been completed. Additionally, as an indicator of students' academic success in college, participants were asked to report their GPA in high school to allow for a statistical comparison between their grades in high school and college study.
- **Pre-entry Skills:** A set of 10 items was utilized for self-reporting the measurement of pre-entry university students' skills. Skill-based questions were designed to assess four main types of skills that have impacts on academic achievement, namely critical thinking, problem-solving, self-confidence, and teamwork.
- **Study Challenges:** The questionnaire assessed college students' adjustment to academic life in their first years at university by rating eight study challenges. The listed challenges reflect various academic obstacles, such as shortages of knowledge resources, academic advising, teaching/assessment techniques, and practical application of courses. Additionally, some challenges highlight weaknesses in students' skills related to searching, communication, and stress management.

Research Hypotheses

The study posits interwoven impacts on the successful transition of Arab students to university, involving six variables: pre-entry skills (PS), study challenges (SC), parents' academic help (PH), family residence (FR), students' expatriation (SE), and family income (FI). Figure 1 illustrates the proposed model, incorporating the structural framework of mediation and moderation effects among study variables. To elucidate, the study formulates six hypotheses to examine the reciprocal impact of these variables:

- **Hypothesis 1:** Study challenges competitively mediate the relationship between parents' academic help and students' success in the first year.
- **Hypothesis 2:** Study challenges competitively mediate the relationship between family income and students' success in the first year.
- **Hypothesis 3:** Pre-entry university skills complementarily mediate the relationship between parents' academic help and students' success in the first year.
- **Hypothesis 4:** Pre-entry university skills complementarily mediate the relationship between family income and students' success in the first year.
- **Hypothesis 5:** Students' expatriation moderates the relationship between study challenges and students' success in the first year.
- **Hypothesis 6:** Family residence moderates the relationship between study challenges and the income of students' family.

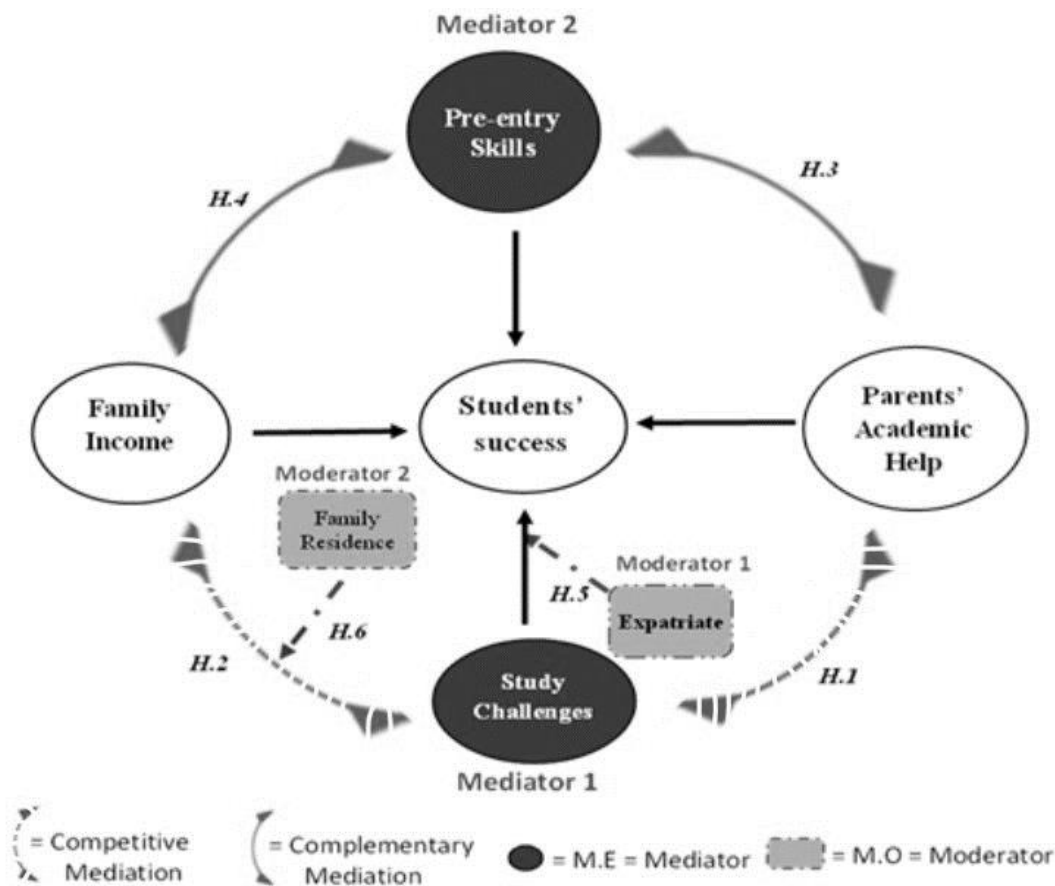


Figure 1. Structure model and study hypotheses

The proposed mediation model encompasses four hypotheses in the study. It assumes two mediators, namely the academic challenges of college study and students' pre-entry university skills, which mediate, respectively, the impact of family's economic level and parents' academic help on students' academic achievement in the first year. Furthermore, two variables, namely students' expatriation and family residence, have been assumed, respectively, as moderators of the relationships between students' success and the academic challenges of college study, and family income.

Participants

The study is grounded on a sample of college students enrolled in 12 academic programs at Fayoum University. The sample comprises two categories: impractical and practical studies. A total of 1267 students participated in the study. Table 1 presents some socio-demographic characteristics of the study sample.

Table 1

Socio-demographic Characteristics of Study Sample

Characteristics of study sample	Total (N= 1267)	(%)
Type of Study		
Impractical Programs: Education, Arts, Arabic & Islamic Studies (Dar Al Uloom), Early Childhood, Specific Education, Social Work	825	65.1 %
Practical Programs: Science, Computer & Artificial Intelligence, Agriculture, Nursing, Pharmacy, Engineering	442	34.9 %
Family Residence		
Rural	862	68 %
Urban	405	32 %
Family Income		
Upper Class	40	3.2 %
Upper Middle	212	16.7 %
Lower Middle	830	65.5 %
Upper Lower	142	11.2 %
Lower	43	3.4 %
Expatriation		
Expatriated Students	287	22.6 %
Resident with Family	980	77.4 %

Instruments and Data Collection

The study collected data during the 2022–2023 academic year at one of the Egyptian universities using an electronic questionnaire through the *QuestionPro* platform. The study targeted students who had completed the first two academic semesters or at least 25% of the credit hours in their enrolled academic program. The study sample participated voluntarily in data collection and provided informed consent for their involvement in the study. The data collection process was approved by the Fayoum University Supreme Committee for Scientific Research Ethics (*FU-SCSRE, Egypt - Reference number: EC2329*).

The questionnaire comprises four main sections aimed at gathering the necessary data on personal, socioeconomic, demographic, and academic indicators. The first section focuses on the collection of personal and academic data, encompassing the field of college study, high school GPA, the number of credit hours completed in college study, and the academic achievement (GPA) in these courses. The second section encompasses socioeconomic and demographic indicators, including family income level, family residence (urban or rural), students' expatriation (whether the student lives with his/her family or is an expatriate), and the extent of parents' academic help or guidance in college study. The last two sections have assessed students' pre-entry university skills and the academic challenges encountered during their first year of university study.

Measurements and Structural Model Assessment

Given the study's purposes and hypotheses, it follows a quantitative design. Partial Least Squares Structural Equation Modeling (PLS-SEM) was employed to assess both the measurement and structural models of the suggested effects among the variables associated with the successful transition to university. The authors utilized Smart PLS4 (Ali et al., 2018; Ringle et al., 2022) to evaluate the mediation and moderation effects among the variables. Furthermore, the reliability and convergent validity of the reflective measurement models were assessed. The outer loadings of the questionnaire items, composite reliability (CR), and average variance extracted (AVE) were investigated to verify the indicators' reliability (Hair et al., 2017; Gannon et al., 2021). The measurement model was evaluated to confirm the reliability and validity of the constructs. The study examined the outer loadings of questionnaire items related to each construct. Table 2 provides an in-depth analysis of the composite reliability and convergent validity for two study's constructs SC and PS.

Table 2
Composite Reliability and Convergent Validity Analysis

Construct	Convergent Validity		Cronbach's alpha	Composite Reliability		Average Variance Extracted (AVE)
	SC	PS		(rho_a)	(rho_c)	
Study Challenges (SC)			0.722	0.768	0.712	0.744
SC1	0.649	0.478				
SC2	0.629	0.297				
SC3	0.591	0.437				
SC4	0.532	0.317				
SC5	0.531	0.388				
SC6	0.625	0.406				
SC7	0.649	0.365				
SC8	0.658	0.342				
Pre-entry Skills (PS)			0.523	0.558	0.711	0.695
PS1	0.412	0.576				
PS2	0.475	0.634				
PS3	0.231	0.689				
PS4	0.328	0.586				
PS5	0.402	0.673				
PS6	0.456	0.701				
PS7	0.427	0.655				
PS8	0.408	0.553				
PS9	0.378	0.699				
PS10	0.393	0.534				

For Study Challenges, each of the eight items (SC1 to SC8) demonstrates strong convergent validity with factor loadings ranging from 0.531 to 0.722. The overall construct achieves a Cronbach's alpha of 0.768, signifying good internal consistency, and a composite reliability (rho_a) of 0.712, exceeding the recommended threshold for reliability. The convergent validity is further supported by a composite reliability (rho_c) of 0.744 and an average variance extracted (AVE) of 0.744, indicating robust validity, surpassing the commonly accepted threshold of 0.5. Similarly, for Pre-entry Skills, the ten items (PS1 to PS10) exhibit significant factor loadings between 0.412 and 0.701, contributing to the construct's strong convergent validity. The overall construct displays reliable internal consistency with a Cronbach's alpha of 0.558 and an even higher composite reliability (rho_a) of 0.711, both exceeding the recommended threshold values (MacKinnon et al., 2007). The convergent validity is confirmed by a composite reliability (rho_c)

of 0.695 and an average variance extracted (AVE) of 0.695, meeting or exceeding the commonly accepted threshold of 0.5 (Ali et al., 2018). These findings collectively affirm the reliability and validity of both study challenges and pre-entry skills as essential constructs in the research context, surpassing established threshold criteria.

Collinearity statistics

Variance Inflation Factor (VIF) values are indicators of multicollinearity, where higher values suggest potential issues with collinearity among predictor variables (Preacher & Hayes, 2008; Ringle et al., 2022). The collinearity statistics by using VIF for the inner model variables are reported in Table 3. VIF values suggest low collinearity among most variables, with VIF values ranging from 1.001 to 1.119. However, it's essential to interpret these values in the context of established guidelines, considering that VIF values < 5 are generally considered acceptable. The findings provide insights into the independence of the latent constructs in the inner model, contributing to the robustness of the structural equation model in capturing the relationships among the specified variables.

Table 3
Variance Inflation Factor of Inner Model

Collinearity statistics (VIF)	
SE -> SS	1.019
FI -> SS	1.037
FI -> PS	1.001
FI -> SC	1.503
FR -> SC	1.014
PH -> SS	1.033
PH -> PS	1.001
PH -> SC	1.003
PS -> SS	1.100
SC -> SS	1.119
FRxFI -> SC	1.511
SExSC -> SS	1.020

Findings

Mediation Analysis

Mediation analysis was conducted to evaluate the proposed model of interwoven impacts of two mediators, namely study challenges and pre-university skills, on the role of parents' academic help and family income level in first-year students' success. The results of the mediation analysis for the first four hypotheses can be summarized as follows:

- **Mediator 1 (Study Challenges - SC)**

H₁: Study challenges competitively mediate the relationship between parents' academic help and students' success in the first year.

The first hypothesis pertains to the mediating role of SC in the relationship between parents' academic help (PH) and first-year students' success (SS) in the first year. The results indicated an insignificant indirect effect of PH on SS through SC (H1: $\beta = .007$, $t = 1.859$, $p > .05$). Furthermore, the total effect of PH on SS was insignificant ($\beta = 0.034$, $t = 1.192$, $p > .05$), and with the inclusion of SC, the effect of PH on SS remained insignificant ($\beta = .034$, $t = 1.195$, $p > .05$). This indicates no mediating effect of study challenges in the relationship between parents' academic help and students' success in the first year.

H₂: Study challenges competitively mediate the relationship between family income and students' success in the first year.

The second mediating role of SC in the relationship between family income (FI) and SS in the first year was examined. The results revealed a significant indirect effect of FI on SS through SC (H2: $\beta = .013$, $t = 2.159$, $p < .05$). The total effect of FI on SS was significant ($\beta = 0.055$, $t = 2.006$, $p < .05$), but with the inclusion of SC, the effect of FI on SS became insignificant ($\beta = .034$, $t = 1.195$, $p > .05$). This indicates a full mediating role of study challenges in the relationship between family income and students' success in the first year. Table 4 presents the conclusion of the results of the mediation effects of study challenges.

Table 4*Mediation Effects of Study Challenges*

Total effects			Direct effect			Indirect effect			95% CI	
β	T	p	β	T	p	β	T	p	Lower	Upper
H1: PH $\rightarrow$ SC $\rightarrow$ SS										
.007	1.859	>.05	.010	0.374	>.05	.007	1.859	>.05	.001	.016
H2: FI $\rightarrow$ SC $\rightarrow$ SS										
.055	2.006	<.05	.034	1.195	> .05	.013	2.159	<.05	.003	.026

PH: Parents' academic help, SC: Study challenges, SS: Students' success in first year, FI: Family income

- Mediator 2 (Pre-entry Skills - PS)**

H₃: Pre-entry university skills complementarily mediate the relationship between parents' academic help and students' success in the first year.

The third hypothesis addresses the mediating role of PS in the relationship between PH and SS. The results showed a significant indirect effect of PH on SS through PS (H₃: $\beta = .016$, $t = 2.706$, $p < .000$). The total effect of PH on SS was significant ($\beta = .099$, $t = 3.218$, $p < .001$), and with the inclusion of PS, the direct effect of PH on SS became insignificant ($\beta = .010$, $t = .374$, $p > .05$). This indicates a full mediating role of pre-entry university skills in the relationship between parents' academic help and students' success in the first year.

H₄: Pre-entry university skills complementarily mediate the relationship between family income and students' success in the first year.

The last mediation effects pertain to the role of PS in the relationship between FI and SS. The results revealed a significant indirect effect of FI on SS through PS (H₄: $\beta = .009$, $t = 1.911$, $p < .05$). The total effect of FI on SS was significant ($\beta = .181$, $t = 6.642$, $p < .05$), and with the inclusion of PS, the effect of FI on SS remained significant ($\beta = .181$, $t = 6.642$, $p < .05$). This indicates a complementary partial mediating role of pre-entry skills in the relationship between family income and students' success in the first year. Table 5 shows the conclusion of the results of mediation effects of pre-entry skills.

Table 5*Mediation Effects of Pre-entry Skills*

Total effects			Direct effect			Indirect effect			95% CI	
β	T	p	β	T	p	β	T	p	Lower	Upper
H3: PH $\rightarrow$ PS $\rightarrow$ SS										
.099	3.218	<.000	.010	.374	>.05	.016	2.706	<.01	.007	.029
H4: FI $\rightarrow$ PS $\rightarrow$ SS										
.055	2.006	<.05	.181	6.642	<.05	.009	1.911	<.05	.002	.019

PH: Parents' academic help, PS: Pre-entry skills, SS: Students' success in first year, FI: Family income

Moderation Analysis

- Moderator 1 (Students' Expatriation - SE)**

H₅: Students' expatriation moderates the relationship between study challenges and students' success in the first year.

The study employed moderation analysis to examine whether students' expatriation (SE) moderates the relationship between study challenges (SC) and students' success in the first year (SS). Without the inclusion of the moderating effect (SC*SE), the R-Sq value for SS was .472. This indicates that 47.2% of the change in SS is accounted for by SC. With the inclusion of the interaction term, the R-Sq increased to 49.7%, indicating a 2.5% increase in variance explained in the dependent variable (SS). Further, the significance of the moderating effect was investigated, and the results revealed a positive and significant moderating impact of SE on the relationship between SC and SS ($\beta = 0.502$, $t = 8.816$, $p < .000$), supporting H₅. This indicates that when students are expatriated in their university study, the impact of study challenges on success in the first-year increases.

- Moderator 2 (Family Residence - FR)**

H₆: Family residence moderates the relationship between study challenges and the income of students' family.

The second suggested moderator is family residence (FR) that moderates the relationship between study challenges (SC) and the income of students' family (FI). The results show that without the inclusion of the moderating effect (FI*FR), the R-Sq value for SC was .464. This indicates that

46.4% of the change in SC is accounted for by FI. With the inclusion of the interaction term, the R-Sq increased to 48.7%, indicating a 2.3% increase in variance explained in the dependent variable (SC). The significance of moderating effect was explored, and the results revealed a negative and significant moderating impact of FR on the relationship between FI and SC ($\beta = -0.133$, $t = 2.301$, $p < .05$), supporting H6. This shows that when the students are from rural regions, the impact of students' family income on study challenges in the first-year increases.

In line with the obtained results, Figure 2 illustrates the structural model depicting the outcomes of the analyses, specifically highlighting the significance of the path coefficients.

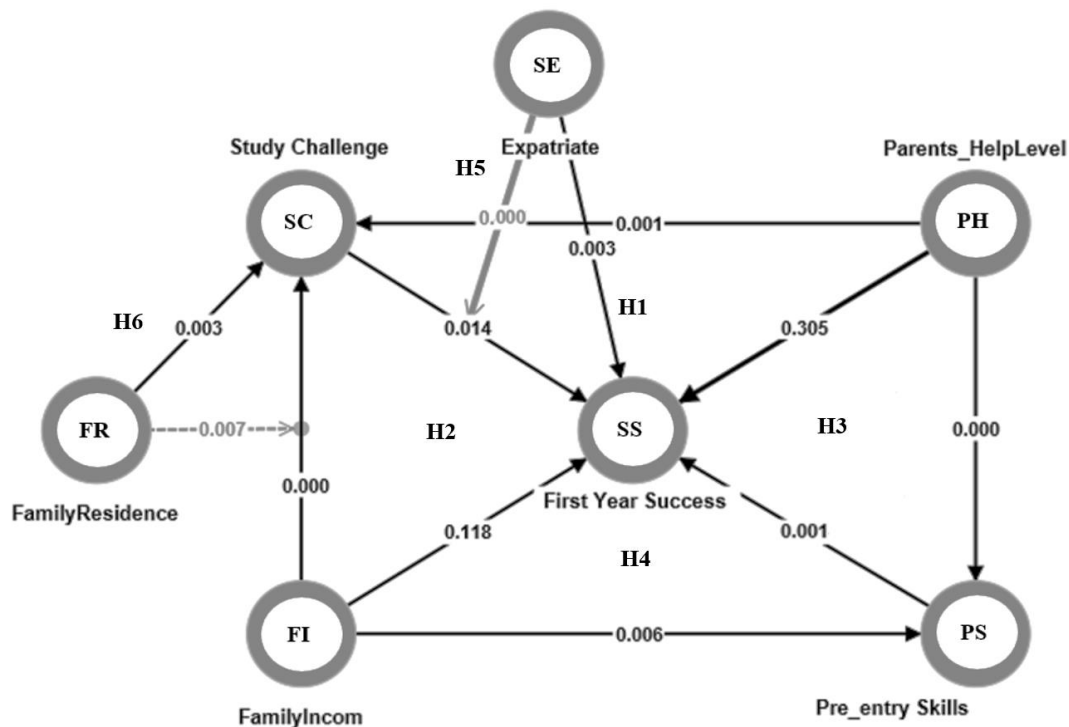


Figure 2. Partial least squares structural equation modeling (PLS-SEM)

It is evident that study challenges do not serve as mediators in the connection between parents' academic help and students' success; however, they play a full mediating role in the relationship between family income and students' success. Furthermore, pre-entry skills are identified as complete mediators in the association between parents' academic help and students' success, with a complementary partial mediating role observed in the connection between family income and students' success. The study also conducted moderation analysis, investigating the moderating impact of students' expatriation on the relationship between study challenges and students' success, and family residence on the relationship between study challenges and family income.

Discussion and Conclusion

The suggested model of effects among study variables has been investigated by exploring the impacts of personal determinants that have socioeconomic aspects on the successful transition to university. As earlier presented in this investigation, much of the prior literature has explored the role of socioeconomic status in reproducing social inequality among college students and its negative impacts on their academic achievements. Various, the current study has addressed the complementary and competitive impacts among social, economic, personal, and demographic indicators that have a prominent value in analyzing the successful transition to university.

As a result, the findings concluded that the positive impact of parents' support on students' success is moderated by their pre-university skills. However, there are no mediation effects of study challenges in this impact. These results suggest that Arab students may experience greater success in university life when supported by parents who guide them in enhancing their pre-university skills. Furthermore, students' competencies in problem-solving, critical thinking, self-confidence, and teamwork play a crucial role in controlling the impact of parents' academic assistance on students' academic achievement in college. This underscores the crucial role of improving these skills, especially with disadvantaged students who may lack parental academic support. These findings align with previous research indicating that parental academic assistance can be a vital source of information and support for students applying to university, particularly in the initial years (McAllister, 2012; Kaczynski, 2012).

It is noteworthy that cultural indicators play a significant role in analyzing these findings, especially when considering the conclusions of previous studies in diverse cultural contexts. For example, Van den Berg and Hofman (2005) concluded that there is no evidence supporting an effect of parental education on Dutch students' achievement and study progress in college. In attempting to analyze the socioeconomic aspects of academic challenges for first-year college students, the presented results argue that the economic level of students significantly influences the impact of study challenges on academic achievement. When considering family residence as a moderator in the relationship between study challenges and family income, the findings illustrate that economically disadvantaged students are facing academic struggles. They possess less familiarity with the academic requirements of college study, leading to various challenges in applying to and succeeding in college. From an interpretive standpoint, O'Sullivan et al. (2018)

concluded that disadvantaged students emphasize an implicit tension between socio-economic disadvantage and their educational challenges.

This awareness should be evident in the development of effective strategies for engaging rural students in campus activities and psychological guidance programs. These recommendations align with prior research suggesting that colleges and universities have faced challenges in effectively engaging with students and their families from socioeconomically disadvantaged backgrounds. It is essential to enhance their skills in certain academic areas (Hamilton et al., 2018). Ultimately, the study concluded that socioeconomic class differences among students persist throughout college life, especially in the first year. Similarly, Phillips et al. (2020) suggested that colleges need to establish more inclusive environments to ensure that students from diverse backgrounds can achieve similar academic performance.

Similarly, the current investigation indicates that higher education institutions, especially in third-world contexts, need to be mindful of variations and cultural mismatches between rural students and their urban peers. Closely related to this, the study findings concluded that students' skills before admission to college serve as complementary mediators, mitigating the negative impacts of their economic class on academic success. In other words, students' competences in certain generic skills, namely problem-solving and collaboration skills, critical thinking, and self-confidence, can assist disadvantaged students in successfully overcoming study obstacles during the transition to college. Goldfinch and Hughes (2007) made a similar argument, concluding that students' initial confidence in their generic skills, such as self-reliance, time management, and teamwork upon entry to university, positively influences academic achievement.

Moreover, considering the economic level of students, Lee and Slate (2014) found that college completion is closely correlated with college readiness, which is influenced by the economic status of students' families. Furthermore, the study determined how the expatriation of students at university can serve as a significant indicator of student success by mitigating the negative impact of study challenges. These results can be analyzed in consideration of the culture mismatch theory and social conditions. The social structure of the Arab community reflects how students' expatriation moderates the impact of study challenges on their academic success, especially in the context of first-year college study. These findings align with previous investigations into international students, exploring the relationships between international students' self-efficacy and their socio-cultural adjustment at university (Zhao, 2010).

In line with the study's conclusions, the results hold significant implications for understanding the dynamics of successful transition to university, particularly in the context of Arab culture and developing countries. The study highlights the intricate interplay of personal determinants, socioeconomic factors, and cultural influences in shaping students' academic journeys. The study represents a key contribution of the recognition of the moderating role of pre-university skills in enhancing the positive impact of parental support on students' success. The findings emphasize the importance of fostering skills such as problem-solving, critical thinking, self-confidence, and teamwork, especially for students lacking parental academic support. Moreover, the study underscores the need for targeted interventions to engage rural students effectively, acknowledging the economic challenges they face. Recommendations include the development of strategies for campus engagement and psychological guidance programs tailored to the needs of socioeconomically disadvantaged students. The persistence of socioeconomic class differences throughout college life suggests the necessity for inclusive environments and support mechanisms to ensure equitable academic performance.

The culture mismatch theory serves as an interpretive framework for the study findings. It is also crucial to interpret the differences in students' achievements across geographic areas. More precisely, external influences need not be national in scope; regional differences in social norms, patterns of in and out-expatriation, or regional economies can also play a significant role. Meanwhile, the study posits that the role of educational decisions could significantly shape the way expatriated students experience college policies and, to a large extent, determine how they can be successfully engaged in academic life. Considering the determinants of Arab culture, providing admission to university is not sufficient to reduce socioeconomic class inequity. Counseling services play an essential role in identifying and addressing economic hardship in college students. Effective strategies need adoption, such as offering scholarships to disadvantaged students, establishing partnerships with economic or social institutions, and providing flexible academic programs to allow students to engage in periods of paid employment.

Limitations and Future Research

The study findings, while important, must be considered within the limitations of the social context, including factors such as Arab culture, developing countries, and the third world. Moreover, some academic indicators and demographic variables haven't been included in this

investigation, such as first-generation students, college study field, educational level of students' parents, intention to leave college study, and gender. Exploring the complex impacts of different variables on successful transition warrants further studies in various cultural and social contexts. Some variables can be investigated in the suggested model for more exploring of college students' success in first year e.g., the educational level of parents, siblings academic help, first-generation indicator, academic advising at university, academic specialization, and intention to leave university.

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