

Financial Constraints and Their Impact on University Students of Different Nationalities in the United Arab Emirates

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Abstract

Financial constraints caused by the economic slowdown in 2020 and COVID-19 that followed, affecting the student motivation for academic achievements, are of strategic importance to the global higher education (HE) sectors. This study aims to examine the effects of financial constraints on the motivation and academic performance of students of different nationalities in the United Arab Emirates (UAE) during the pandemic. This study will help us recognize the challenges among students from different backgrounds and nationalities and develop remedial strategies with a global perspective. We used a Likert scale-based questionnaire to collect data on motivation level, and associated variables from a sample of 371 students enrolled in different colleges in the UAE. Statistical techniques such as t-test, *F*-test, and chi-square test were used to explore the relationship between the variables in the data. The findings of the study revealed that financial constraints during the pandemic did not significantly affect academic motivation, regardless of gender, nationality, and age. The participants expressed that they were prepared and aware of the sunk costs involved in education. However, as the financial impact of the pandemic extended beyond 2020, unemployment increased, and parents were less prepared to bear their children's education costs. This inevitably increased the responsibilities of the universities to provide financial support to deserving students.

Keywords: financial constraints, motivation, academic achievement, higher education

Introduction

Higher education (HE) benefits individuals and economies with better opportunities for growth and development worldwide. However, various socioeconomic and psychological factors impede the prospects of achieving better economic development through HE both at the economic level and in personal life. Over the last several years, the world economy has been slowing down and affecting the HE sectors. Moreover, COVID-19 pandemic has affected all spheres of life, and the International Monetary Fund (IMF) estimated that the financial crisis would be worse than the Great Depression, with no exemption in education. Globally, economic activities declined by about

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4.9% ((IMF, 2020). Measures taken to contain the spread of the SARS-CoV-2 accentuate the economic slowdown further.

As early as April 2020, almost all schools and colleges closed, affecting more than 85 percent of the students who were forced to stay at home. During this period, parents endured job losses, pay cuts, and a total slowdown in the business. Such persisting changes have forced students and parents to feel the pressure of the cost of the HE.

Since 1990, the United Arab Emirates (UAE) has witnessed large-scale HE growth, with enrollment in nearly 400 academic programs concentrated mainly on business, management, information technology, and engineering. The UAE economy barely emerged from an economic slowdown in 2020, when COVID-19 struck all economic activities worldwide.

During the pre-pandemic period, an estimate of 4% growth at a compound annual growth rate (CAGR) of private education in the UAE was expected to be nearly four times the pace of growth in public education enrollment (The World Bank, 2020), but the unemployment rate in 2019 increased rapidly from 2.64% to 5%.

With over 200 nationalities represented among the students, the UAE can become a top global education hub and affect the future of knowledge, skills, and employment by luring more top-quality foreign teachers and students while fostering the UAE's research culture. Recent reports have suggested that the UAE is vying for the top position as an international destination for students alongside the US and Canada. A 62 percent increase in enrollment during 2012–2018 among international students in the tertiary education sector of the UAE cite major reasons as the flexible changes in visa policies, standard of living, safety, and cost-benefit analysis (Economic Times, Aug 17, 2021). Economic factors, including financial constraints, affect student's motivation and academic achievement, increasing the probability of college drop-out. To some extent, financial aid plays a vital role in the student's educational aspirations and leads to better confidence and motivation, reflecting in the student's academic performance. Various universities restricted the support of scholarships during the economic slowdown, which forced various students to move back to their home countries to seek more affordable education.

Many studies have highlighted that colleges and universities will face more challenges in budgeting, enrollment, and recruiting, other than research, teaching, assessments, and accountability (Masika & Jones, 2015). Thus, the financial constraints that have seriously affected the retention levels are important to the strategic implications for universities worldwide. The

majority of students feel neglected when financial aid and scholarships are awarded to only a few (or the top merit students) at the universities. Financial distress contributes to poor academic performance and affects the students' self-esteem, leading to absenteeism and unsatisfactory performance in examinations.

Apart from the direct effect of financial stress on the student's level, stress originating from the family also predicts varying outcomes in the academic environment (Heckman et al., 2014). Hence, examining students' financial stress and academic performance will help the majority solve their problems and focus on their education without harming their self-esteem and self-efficacy.

Many authors have claimed that environmental factors affect students' motivation and academic progress. It has been shown that pupils from higher-income families were more likely to attend schools with better facilities and resources. Such environments positively affect both high- and low-income students positively (Wolniak & Engberg, 2010). Using the meta-analysis method, Sirin (2005) suggested that socioeconomic status of parents impacts students' academic performance. Strenze (2007) also examined the relationship between the socioeconomic status of parents with the students' grades and found that these two variables were positively correlated, predicting success in a career.

From the evaluated relationship between financial aid and student success, Yutong (2013) found that students who received the scholarship performed better, scoring a higher-grade point average (GPA) compared to other students struggling throughout their student life. Another study examined the relationship between family economic stress and the educational outcome of Chinese American adolescents and found a significant relationship between family economic downturn and academic performance (Mistry et al., 2009). Weaver (2013) examined previous studies, which found no connection between students' financial duties and academic achievement, financial responsibility, academic motivation, and success. Ngene et al. (2014) analyzed the financial strength and academic performance of Nigerian polytechnic students. Phi coefficient, chi-square, and bi-serial correlation results showed that insufficient financial support impacts students' performance to bridge the gap between academic motivation and financial limitation. Students' academic goals reflect their motivation-driven aspirations Ryan et al. (2000). academic self-efficacy, desire, and aptitude for self-directed learning all impact students' motivation (Patall et al., 2008). There are no significant differences between male and female students. Furthermore, students' activities were viewed as motivators (Saleh, 2014; Seifert, 2004). As seen in the past, the

need for achievement and affiliation is commonly associated with motives for better academic performance. Financial constraints are common, especially for those from impoverished or low-income homes. Previous studies have shown a connection between students' academic achievement and financial situation. Olufemioladebinu et al. (2018)) claimed that their parents' money or social status affects students' academic achievement in an examination. They found that students with low socioeconomic family backgrounds have lower academic performance than students with higher socioeconomic family backgrounds. Furthermore, Asri (2016) asserted that students from higher-income families could benefit from a stimulating learning environment, enabling them to excel and achieve superior academic outcomes.

Nnamani et al. (2014) asserted that students' financial anxiety considerably contributes to their poor academic performance as they cause stress and have a negative impact on self-esteem, as shown by previous studies. Asri (2016) found that various factors affect a student's academic success. However, family socioeconomic difficulties are crucial as they deal with money management that inspires and motivates people to be passionate about getting good grades.

Contrary to all the studies mentioned above, Asri (2016) claimed that when highly driven students face a financial crisis, they may use the issue as motivation and not deter them from achieving academic success. Weaver (2013) evaluated financial responsibility, academic motivation, and success as contradictory to other previous studies that show no significant relationship with academic performance. Ngene et al. (2014) analyzed the financial strength and academic performance of Nigerian polytechnic students. Financial constraints faced by students also cause drop-out rather than affecting their academic motivation and performance. Stinebrickner and Stinebrickner (2008) showed that though financial and credit constraints can lead to dropout, students from low-income families may drop out for other non-economic reasons. A study conducted in Italy showed that the effect of financial constraints on academic dropout during the Great Recession is mixed.

If the economic downturn increases adult unemployment, the student's father's income is likely threatened, and they are forced to drop out for a job search. However, if youth unemployment rate increases due to the economic downturn, students are likely to stay at university and complete their education. Thus, the adverse employment shock to the family increases college dropout (Adamopoulou & Tanzi, 2017).

Historically, many studies emphasized a lack of belongingness to the university, problems related to future aspirations, relationships with peers, understanding the processes associated with university life, etc., as additional reasons for dropping out (Delaney, 2008, Thomas, 2012). Many studies conducted in the US and European countries showed that positive emotions help academic achievement whereas negative emotions are associated with dropout (Duque, 2014).

Researchers have noted that gender differences affect whether a university education is successfully completed, and previous studies have shown that women are more likely than men to succeed in college. According to Buchmann and DiPrete (2006), academic preparation and environmental support can place women in a better position to achieve college completion than men. Some informal surveys revealed that more women dropouts were found in higher education than men due to financial standings. Hence, the researchers observed a considerable gap in gender differences and related variables. This study also explored whether factors such as countries of origin/nationality play an important role in students' motivation. Overall, it was found that the attitude of students across the globe toward educational programs may be unique. Similarly, the cultural environment substantially impacts students' motivation for their studies, even though this topic has been the focus of numerous research from various perspectives. The researchers were surprised to find significant differences in student motivation and nationality. In summary, several factors affect academic achievement, and the material mentioned above shows how financial limitations affect students' academic success. The majority of the studies support the positive relationship between financial constraints and academic performance. However, few studies have shown contradictory findings. Studies on financial behavior and problems among college students in the Gulf region during the pandemic are very limited.

In addition, this study examined the role of gender and nationality differences in student motivation and academic performance due to financial constraints. This study aims to examine this relationship in the backdrop of the COVID-19 scenario to inspect the relationship between financial issues on student motivation, academic achievement, and chances to drop out from a multicultural perspective. This study is therefore anchored on the following hypotheses:

Hypotheses -

- There is no significant relationship between students' financial constraints and motivation.
- There is no significant relationship between students' financial constraints and academic performance.

- There is no significant relationship between students' financial constraints and student dropouts.
- There is no significant difference in the financial constraints among students based on demographic variables such as gender, education, and nationality.
- There is no significant difference in motivation among students based on demographic variables such as gender, education, and nationality.

Research Methodology

A descriptive research design was adopted by the study based on the type of data to be used in the investigation. Using a survey, relevant data were collected from the sample of university students, and inferences were drawn about the population.

Study Participants

The population of the study consisted of 371 students from 15 colleges. The simple stratified random sampling method was utilized to select the participants from highly diverse mid-sized private universities in the UAE. Their demographic profiles differed by gender, age, monthly income, major subject, and nationality, as shown in Table 1.

In the first stage, universities were selected using the stratified random sampling. In the second stage, simple random sampling (lottery method) was used to select schools/faculty departments (arts, science, and commerce). In the third stage, incidental sampling method was utilized to select the students. Before data collection, ethical approval was obtained from the IRB of both places.

Materials

The primary sources of this study's data were surveys that assessed how students' GPA scores and financial constraints affected their desire and ability to succeed academically. The first two variables were explicitly created for measuring financial constraints (Financial constraints are factors that restrict the students' educational growth), which included questions about the financial status of the respondents' families and their understanding of it before and during the pandemic since January 2020. Other items in the survey included questions about the participants' academic motivation records. The Academic Motivation Scale includes items that are divided into the

essential components of motivation activation, persistence, and intensity around which items about (a) approach to their academic work, (b) self-perceptions, (c) perspectives on learning, success, and college, (d) study techniques, and (e) motivations for learning. The scale consisted of 25 items under three sections of the questionnaire modified to address the targeted participants using previous studies.

Six experienced researchers cross-verified all these test items using a split-half reliability method, one half of which was for odd items and the other half for even items. The Pearson product-moment formula was used to find the correlation coefficient between two halves and showed a 0.7 coefficient for half-test reliability. A coefficient of 0.92 was found for whole test reliability using the Spearman-Brown formula. Hence, the study findings revealed high reliability at a significance level of 0.01.

Procedure

1. Before asking them to sign the consent form, the participants were briefed about the purpose of the study. The survey's questions about financial information and academic motivation had clear instructions and explanations. Then participants were instructed to complete the academic motivation scale. Surveys and consent forms were numerically coded for data analysis.

Method of Data Analysis

Quantitative variables were expressed as mean \pm SD, and categorical variables were expressed as frequency (%). Students' motivation was described using descriptive statistics, including mean \pm , SD, median, minimum, and maximum. The independent t-test and one-way ANOVA test with Scheffe's multiple comparisons (post-hoc test) were used to evaluate quantitative parameters between the categories. The chi-square test was employed to determine whether category variables were associated. Analyses were conducted using the statistical package for the Social Sciences (SPSS), and $p < 0.05$ was considered the statistical significance level for all statistical interpretation ns (version 20.0).

Table 1*Demographic and Financial Details of the Sample.*

	Gender	Count	Percent
	Male	89	24
	Female	282	76
Institution			
	Private	44	11.9
	Semi-Govt.	70	18.9
	Govt.	257	69.3
Nationality			
	Expatriate	240	64.7
	UAE	42	11.3
	Others	89	24
Program enrolled			
	UG	22	5.9
	PG	349	94.1
Number of earning members in the family			
	1	190	51.2
	2	114	30.7
	Above 2	67	18.1
Number of earning members in a family			
	1	201	54.2
	2	114	30.7
	Above 2	56	15.1
Any financial challenges in the family			
	Don't know	18	4.9
	No	138	37.1
	Yes	215	58
Monthly income of my family			
	AED <1500	143	38.5
	AED 2000	91	24.5
	AED3000 - 5000	60	16.2
	AED >5000	77	20.8
Scholarship availability			
	None	174	46.9
	AED <2500	38	10.2
	AED 2500 - 5000	72	19.4
	AED 5000 - 7500	31	8.4
	AED >7500	56	15.1

Quantitative data were collected from a random sample of universities in the UAE. From the stratum, 69.3 percent of students participated from different government universities in the UAE, whereas 64.7 percent of students' participants are expatriates; this includes students from Gulf Cooperation Council (GCC) countries, Europe, and other Asian countries. Although 11.3 percent of the students were UAE nationals, the rest were from the neighboring Arab region, Europe, and Asian countries.

The researchers chose the UAE because of the existing data infrastructure that supports high-quality data collection. The participants are geographically dispersed. Over the past 10 years, the UAE's population has doubled, reaching over 9 million people, with a large expatriate component of roughly 85 percent of the total population. The highest number of international branch campuses is located in the UAE, which is also an effective global hub for higher education (The National, 2014).

Of the sample, 76 percent were female students, and the rest were male. Among them, 11.9 percent belonged to private universities, and approximately 88 percent were reported to be enrolled in government or semi-government universities. Most of the students were in graduate classes, with only 5.9 percent from undergraduate programs, but approximately 85 percent of them had one or two of the family members earning income during the pandemic, and 15.1 percent had more than two earning members in the family. Approximately 37.1 percent reported that they did not face financial challenges during the pandemic, and 4.9 percent were not aware of the financial situation in their family. The rest, 58 percent, reported that their families faced financial challenges. Around 46.9 percent of the students reported that they had no scholarships, while 29.6 percent reported having scholarships of less than 5000 AED. However, 23.5 percent reported having more than 5000 AED scholarships.

Comparison of motivation and academic performance based on financial constraints

Table 2

Distribution of the Sample According to Financial Constraints Due to the Pandemic

Any financial crisis due to the pandemic	Count	Percent
Don't know	15	4.0
No	179	48.2
Yes	177	47.7

The response in the sample to the question of whether they perceive any financial crisis due to the pandemic is mixed, as 48.2 percent reported they did not encounter any financial constraints. A nearly equal proportion of the sample confirmed that they faced financial constraints. However, studies worldwide have shown that some students feel socially isolated, insecure, and worried about family and finances, but some students are likely to replace these worries with more rewarding personal experiences in order not to feel stressed (Aristovnik, Keržič, Ravšelj, Tomaževič, & Umek, 2020).

Table 3

Comparison of Motivation Based on Financial Constraints

Financial constraints	Mean	SD	N	F	P
Don't know	53.5	3.2	15		
No	54.0	5.2	179	1.22	0.296
Yes	53.1	5.6	177		

The relationship between financial constraints and academic motivation has not been widely examined by the previous studies. Finances assume importance in academic motivation, especially when the students are responsible for educational costs. (Hamilton, 2013) has commented that parental support in the financial responsibility for education decreases academic motivation and hence decreases scores. Weaver (2013) reported that there is no significant relationship between financial responsibility in education and academic motivation. This may have contributed to the finding that financial constraints do not significantly affect it.

Table 4

Percentage Distribution of the Sample by Semester Scores

Semester scores	Count	Percent
90 – 100	39	10.5
80 – 89	171	46.1
70 – 79	144	38.8
60 – 69	17	4.6

According to Table 4, 46.1 percent of the student sample secured a semester score of 80–89. Most of the respondents in the sample have moderate academic achievements. However, only 4.6 percent reported low scores of 60–69.

Table 5

Financial Constraints and Semester Scores

Semester Score	Any financial constraints						χ^2	P
	Don't know		No		Yes			
	Count	Percent	Count	Percent	Count	Percent		
90–100	0	0.0	14	7.8	25	14.1	22.66	p<0.01
80–89	14	93.3	87	48.6	70	39.5		
70–79	0	0.0	73	40.8	71	40.1		
60–69	1	6.7	5	2.8	11	6.2		

The chi-square test results showed no significant relationship between students' financial constraints and academic performance.

(Coleman, 2010) defined higher education fees as a “sunk cost,” meaning costs that cannot be retrieved once paid. Therefore, after paying fees as a part of the enrollment process, students will likely continue with the same educational activity regardless of external environmental changes. The intrinsic motivational factors will sustain them in their academic activities, so financial constraints may not affect their academic performance. This finding is in line with the results reported by Weaver (2013), who suggested that financial constraints do not affect academic performance.

Relationship between financial constraints and student dropouts in the Universities

Table 6

Percentage Distribution of the Sample According to Planning to Drop Out Due to Financial Issues

Planning to drop out due to financial issues	Count	Percent
Don't know	44	11.9
No	190	51.2
Yes	137	36.9

Table 7

Plans to Drop Out Due to Financial Crisis

Planning to drop out due to financial issues	Any financial crisis due to the pandemic						χ^2	P
	Don't know		No		Yes			
	Count	Percent	Count	Percent	Count	Percent		
Don't know	0	0.0	13	7.3	31	17.5	25.44	p<0.01
No	13	86.7	107	59.8	70	39.5		
Yes	2	13.3	59	33.0	76	42.9		

The majority of students (51.2%) reported that they would not drop out of the school due to financial issues in the wake of the COVID-19 pandemic (also supported by Coleman [2010]). Through a simulation experiment, he proved that students who paid fees at or below their budget are likely to continue with their educational decisions, even if they know that some of their peers

have enrolled in a free or a similar course with a higher probability of completion. This is because the sunk cost increases their commitment to the investment they have already made, but 36.9% expressed that they might drop out due to financial issues, while approximately 11.9% were unsure of their opinion.

A global study by Aristnovik et al. (2020) showed that students who already have financial challenges due to their lower living standards, lack of scholarship, or facing job loss could feel threatened to drop out of their enrolled courses. The authors suggested that there could be geographical differences in these results, particularly for Asia and Africa, as this has implications for international and national educational decision-makers to respond to students due to the pandemic. However, the study sample showed no significant relationship between financial constraints due to the pandemic and student dropouts.

Though 44.9% of the male students and 48.6% of the female students reported that there was a financial crisis. However, there is no statistically significant difference in perceptions of the financial crisis by gender. Similarly, although 45.5% of the students studying at private universities, 50.6% of the students studying at semi-government universities, and 38.6% of the students studying at government universities reported that they experienced a financial crisis due to the pandemic, the difference is not statistically significant.

Table 8

Chi-Square Test Results to Test the Relationship Between Variables

Gender	Any financial crisis due to the pandemic						χ^2	P
	Don't know		No		Yes			
	Count	Percent	Count	Percent	Count	Percent		
Male	4	4.5	45	50.6	40	44.9	0.38	0.828
Female	11	3.9	134	47.5	137	48.6		
Institution	Any financial crisis due to the pandemic						χ^2	P
	Don't know		No		Yes			
	Count	Percent	Count	Percent	Count	Percent		
Private	2	4.5	22	50.0	20	45.5	3.54	0.472
Semi Govt.	4	5.7	39	55.7	27	38.6		
Govt.	9	3.5	118	45.9	130	50.6		
Nationality	Any financial crisis due to the pandemic						χ^2	P

	Don't know		No		Yes			
	Count	Percent	Count	Percent	Count	Percent		
Expatriate	6	2.5	103	42.9	131	54.6		
UAE	4	9.5	29	69.1	9	21.4	19.8*	p<0.01
Others (US, Europe)	5	5.6	47	52.8	37	41.6		

Any financial crisis due to the pandemic							χ ²	P
Program enrolled	Don't know		No		Yes			
	Count	Percent	Count	Percent	Count	Percent		
UG	0	0.0	7	31.8	15	68.2	4.31	0.116
PG	15	4.3	172	49.3	162	46.4		

**Significant at 0.05 level*

Approximately 54.6% of the expatriate respondents enrolled in the UAE, 21.4% of UAE nationals, and others (41.6%) from European countries reported financial problems due to COVID-19. The chi-square test results showed that nationality had a significant impact on financial constraints due to the pandemic.

Table 9

Comparison of Motivation of Students Based on Gender

Gender	Mean	SD	N	T	P
Male	54.0	5.2	89	0.83	0.408
Female	53.4	5.4	282		

Table 10

Comparison of motivation of students based on the institution

Institution	Mean	SD	N	F	Sig.	Scheffe's multiple comparisons		
						Pair	F'	p
Private (A)	50.5	5.9	44	8.64	p<0.01	A & B	7.4**	0.001
Govt. (B)	54.4	4.5	70			A & C	7.5**	0.001
Semi-Govt. (C)	53.8	5.3	257			B & C	0.3	0.718

**:- Significant at 0.01 level – the significant association is observed, and the null hypothesis is accepted.

Table 11*Comparison of Motivation of Students Based on Nationality*

Nationality	Mean	SD	N	T	p
Expatriate	53.9	5.0	240		
UAE	53.5	6.6	42	2.21	0.111
Others	52.6	5.4	89		
Program enrolled	Mean	SD	N	T	p
UG	55.0	4.7	22		
PG	53.5	5.4	349	1.27	0.205

The unknown relationship between a student's motivation and country is an issue this study aims to address. This is considered as one of the novel issues that specialists should consider for further insightful analysis. The present study failed to identify statistically significant relationships between student motivation and nationality. According to Ryan and Deci's self-determination theory (2000), human behavior depends on satisfying innate needs for autonomy, competence, and relationships because these requirements serve as the basis for all motivation (Deci et al., 1991). Basic psychological needs are crucial to the motivation to continue education, which is mainly applicable to students from developing and underdeveloped countries.

Discussion and conclusion

The impact of financial constraints on student motivation and academic achievement has been the subject of extensive research and policy considerations in recent years. One of the main concerns of finance, especially during a pandemic, is whether the limitation of money impacts the students' academic performance and motivation. A compassionate atmosphere is required to address the educational demands of students facing financial issues when the entire market scenario is going through a crisis of parents' joblessness, which again puts pressure on both parties. It remains an open question whether any financing constraints experienced by students contributed to the lack of interest in studies that affect their performance or other factors. Despite substantial research, there is no conclusive evidence of the situation during a pandemic, especially in a market with several residents from different parts of the world. This study further contributes to illuminating this issue by assessing the impact of financial constraints on student motivation, academic performance, and dropout among university students of different ages, gender, and nationality.

The study was conducted with 371 students from different colleges during COVID-19 in the UAE. An important strength of our data is that it focuses on several mid-sized universities from the UAE. Moreover, comparative analysis was conducted to observe whether there is any relationship between students' motivation and academic achievement besides the chances of dropout during the pandemic. This will be the first study to examine the relationship between financial constraints with academic motivation and dropouts during a pandemic in the UAE's diverse population. Our baseline results document that students will not drop out due to the financial constraints they faced during the COVID-19 pandemic. The results aligned with Hamilton (2013), where financial constraints had no relationship between student motivation and academic performance. Concerning the financial issues across the demographic variables, it was reported that gender or university type did not have a significant effect on academic performance and motivation.

However, nationality influences the perception of financial constraints. Our results provide new evidence for the role of finance in students' academic performance and motivation regardless of scholarship. Factors such as financial constraints do not directly affect the students. After accounting for all the factors, the results contradicted some of the previously conducted studies. Studies such as Sirin (2005), Wolnaik and Engberg (2010), and Mistry et al. (2009) suggested that even during a pandemic, students invest heavily in their academics. Moreover, they are determined to maintain their CGPA for a better career break (Coleman, 2010). Our result was similar to that of Weaver (2013) and Ngene et al. (2014), suggesting that students will persist in pursuing academic success through intrinsic incentive factors. Hence, financial limitations will have little impact on their motivation and academic achievement. Concerning the results of motivation and academic performance, it was reported that 48.2% of those who did not face any financial constraints due to the pandemic was not demotivated as the focus was to graduate faster, either to find a job or for further studies. This clearly showed that half of the sample was not affected by the pandemic, and the parents did not make the students feel discomfort of their financial inadequacies.

Therefore, when people plan ahead, they often prefer solutions with greater long-term advantages, even if their immediate costs are higher. People are more prone to show a present bias and choose a smaller immediate payment rather than expecting a greater long-term benefit. In the face of some of these problems, people may make decisions based on "rules of thumb" or heuristics rather than

a full assessment of costs and benefits. Students may rely on the experiences of their peers, who might not have received any additional scholarships in their sophomore year concerning important concerns such as financial aid refiling after enrolling in college, rather than applying themselves and seeing what happens.

Another common heuristic in decision-making is the use of anchors or reference points, which frequently takes the form of comparing performance and effort to peer behavior or achievements. A growing corpus of data, for instance, shows that a person's standing among peers significantly affects their academic performance (Castleman & Meyer 2019).

However, the other half of the sample confirmed that they face financial constraints in this situation, which gives a two-sided effect of a pandemic on motivation and academic performance favoring studies conducted by Nnamani et al. (2014), Asri (2016), and Oyediran (2018). From our study, it is evident that motivated and engaged students focus on achieving better results, and parents focus on giving their children a better environment to study in so they can build a better future despite their financial restrictions, regardless of any crisis.

When the effect of demographic differences, including age, gender and nationality on financial constraints and academic motivation is analyzed, it can be reported that motivation levels of students from different countries did not differ or change in any way. Although a few studies have already established the relationship between cultural context and students' motivation toward studies. This implies that regardless of gender, nationality, and age, parents were prepared and were aware of the sunk cost of education, which is one of the many other reasons the study showed the results in favor of the literature already reported by Coleman (2010) and Weaver (2013). From the analysis of dropouts due to the pandemic, surprisingly, the results show that more than half of the sample (51.2%) will continue their education and focus on the completing the course, supporting the results reported by Coleman (2010) and Weaver (2013). Thus, regardless of external environmental changes, students will likely continue the same educational activity after paying the fees or completing the enrollment process. Any constraints are unlikely to have an impact on their academic progress as the intrinsic incentive components will continue to engage them in academic endeavors.

Thus, the findings clearly reveal that intrinsic motivation is associated with actual student engagement, and that motivated students not only complete their learning activities but also invest

more time and effort in understanding the subject matter thoroughly (Newmann, 1992). It is important not to extrapolate too far from the findings of this study.

More research is needed to help policymakers, and institutional leaders better understand students' drop-out behaviors, how students value different aspects of financial assistance packages, and what tradeoffs they would make if their aid packages were changed. In light of this context, the researchers may speculate that financial constraint during a pandemic is not a major factor for student motivation, academic performance, and dropout (rate). A dynamic SEM must comprehensively grasp other elements that could affect students' future academic progress.

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