Analyzing The Effects of International Migration on Kathmandu's Education System: Examining the Impact of Pursuing Higher Education and Career Opportunities Abroad.

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Abstract

This article studies the global migration dynamics of Kathmandu particularly on the local level educational institutions affected by the desire of hundreds of thousands of students to undertake studies abroad and seek jobs. The trend of student migration was highlighted and study also analyzed the impact of the trend on the trends of enrollment, faculty performance and education quality. A mixed-methods approach was undertaken to obtain data, including student and teacher surveys as well as legislator interviews. Studies make a case that international migration has more than increased pressure on local colleges to internationalize, it has decreased retention of students and led to brain drain. Migration seems to offer opportunity at an individual level but leads, as the study notes, systemic challenges for the education sector in the Kathmandu valley. Also includes recommendations for policies aimed at both local education expansion and sending students abroad.

Keywords: *International Migration, Education System, Kathmandu, Brain Drain, Higher Education*

1. Introduction

International migration has increased, particularly among students in Kathmandu who are pursuing improved educational and job opportunities in other countries (Nepal Ministry of Education, 2023). This exodus is primarily due to political unrest in Nepal, lack of infrastructure for research, and outmoded curricula (Sharma & Adhikari, 2022) (K.C., 2020). Although overseas education helps people develop personally and financially, it can also be a headache for the local education system as they have to keep students in the schools with attracting talents (Dahal & Aryal, 2021). The subsequent brain drain is significantly affecting the socioeconomic growth and academic sustainability of Nepal (Bhattarai, 2021). Although some students return with talents that benefit the nation (Ghimire, 2022), there remains concern about the cumulative impact of migration on Kathmandu's system of education. This paper is an attempt to study these trend and discuss some of the recommendations to address the issues in higher education system of Nepal.

2. Problem statement

Increasing overseas migration, especially of Kathmandu workers and students, has become a matter of national concern in general and for education in particular. Thousands of people migrate every year to look for good opportunities abroad due to outdated curriculum, unstable political environment, and poor infrastructure at home (K.C, 2020) (Shrestha, 2020). In 2019 alone, over 63,000 students were granted No Objection Certificates for studying abroad (Ministry of Education, 2020). The mass emigration of leaders leads to issues regarding the staffing of local institutions and reduced enrollment (Adhikari & Gurung, 2020). The brain drain resulting from the government has led to an increase in inequality in Kathmandu's education system by widening the gap between the demand for quality education and the supply of qualified professionals. Despite these trends, little is known about the systemic and institutional consequences of this outflow. This essay, therefore, attempts to put into perspective the larger potential

migration holds, while also making a case for the retention of talent and education upliftment at the regional level.

3. Objective of the Study

- To see if the important factors—sociopolitical circumstances, job opportunities, quality of schooling, and economic security—affect the decision of students for going abroad for higher study.
- To assess the impacts of global migration on Kathmandu's educational institutions On declining student enrollment rates, financial challenges, and teacher retention challenges.
- To compare the employment opportunities, income status, work satisfaction of the migrants and the non-migrants to ascertain the career development prospects and dilemmas for students who remained in Nepal.
- To examine the issue of brain drain and its impact on Nepals socioeconomic development in terms of decreased reinvestment in the home community and loss of human capital.
- To recommend institutional and policy measures like better curricula, scholarship programs, and employment incentives to mitigate the adverse impacts of student mobility.

4. Research Questions

RQ1. What are the main motivating and deterring factors of Kathmandu students working and studying overseas?

RQ2. What effect does having international students have on the universities in Kathmandu in terms of retaining instructors, enrollment levels, and profitability?

RQ3. What opportunities and challenges are available for students who stay in Nepal versus those who migrate?

RQ4. How brain drain and specifically loss of quality labor and decrease in re-investment of host countries faces Nepal in terms of socio-economic development?

RQ5. Such student mobility has negative consequences for Nepal's education system. What institutional and policy measures can help mitigate its negative effects?

5. Significance of Study

The significance of this study to academia is that it analyzes the relatively ignored impact of the international student emigration through a Kathmandu-centered perspective (Dahal & Aryal, 2020). This paper highlights the push and pull factors like limited employment opportunities and poor educational facilities (K. C., 2020) (Shrestha, 2020). The aim of this study is to provide data that can inform policy-makers on bettering retention (Adhikari & Gurung, 2020) through desired actions on effective instructor retention, developing curriculum, and improving the scholarship process. It provides practical help to regional colleges to overcome enrollment loss by suggesting proposals that are in-line with the international norms (Shrestha, 2020). The impacts brain drain have upon society and economy are analysed, and return through migrant contributors and investment in education are encouraged for the alround betterment of the country through the study (Shrestha, 2020) (Poudel, 2020). It shows the transforming trends of students mobility and fitness in terms of labor and talent migration globally (K.C., 2020).

6. Literature review

The growth of student mobility globally is attributable to educational inequality, socioeconomic conditions, and orientations toward pro-student policies of hosting countries (Altbach & de Wit, 2018). There are more than 5 million students studied abroad, a greater proportion of which come from underdeveloped countries such as Nepal (OECD, 2019). An increased number of student migrations from Nepal specifically can be attributed to limited opportunities within the country, poor education systems and greater employment opportunities in more developed countries (Choudaha, 2019) (Van Mol, 2020).

The review covers the broad impacts of student exit on Nepal's education system as per (Dahal & Aryal, 2020), while (Poudel, 2020) links brain drain to long term socioeconomic impacts. Narrowing down to Kathmandu, (Sharma & Adhikari, 2022) manage to capture a local avowal of the advantages of and difficulties posed by OUTBOUND student mobilities. Good as far as they go, but decent evidence base or no, most of the literature I have seen hones in on macro-level trends, without necessarily providing targeted and data-driven analyses of Kathmandu's educational dynamics.
Some of the theoretical frameworks which offer baseline understandings of why students migrate are the Human Capital Theory (Becker, 1964), the Push-Pull Theory (Lee, 1966) and the World Systems Theory (Wallerstein, 1974). The Social Network Theory (Massey et al., 1993) explains that having preexisting relationships overseas affects migration decisions. But these theories have rarely been applied rigorously to the situation in Kathmandu, at least not in their quantitative form.

Apart from the general observation, there is a huge research gap pertaining to the special effect of international student movement on the educational system of Kathmandu. Furthermore, the majority of existing research lacks granular data connecting migration rates to social networks, perceived education quality, legislative incentives, and economic conditions. Through the gap due, this study offers a localized analysis in Kathmandu and evidential based insights whereby it could contribute policies that may serve to improve institutional quality along with local educational retention.

7. Methodology

The philosophy applied in this research is practical paradigm and more precisely in mixed method i.e both paradigm of positivism and interpretivism to comprehend complex issue of the students migration from Kathamandu in order to achive higher education. According to Creswell and Creswell, 2018, pragmatism enables considering subjective experiences alongside with objective facts, therefore allowing a more holistic view about the phenomenon.

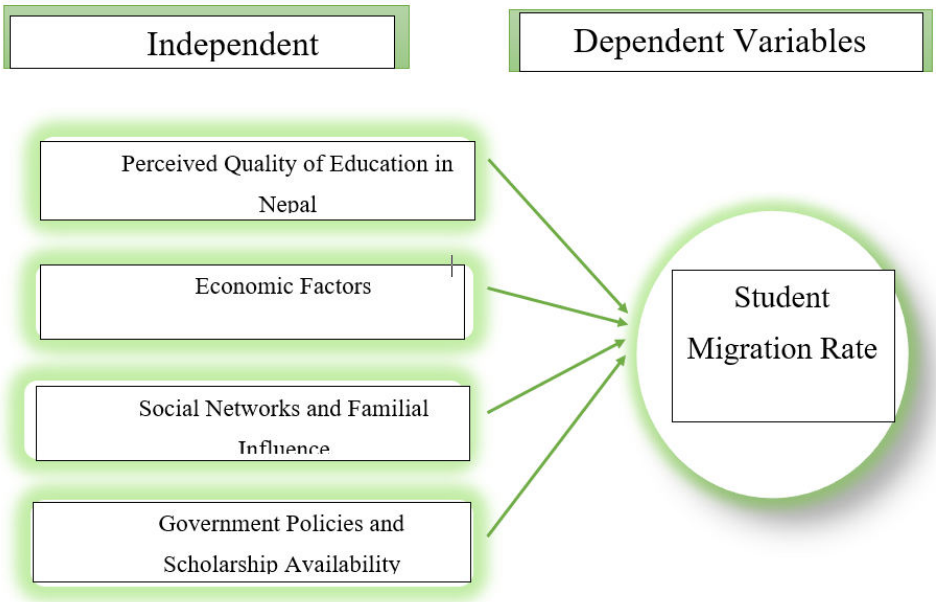
A mixed-methods approach employs both quantitative and qualitative methodologies. To gather quantitative data, a survey to Nepali students who went abroad for higher education is given to them. The poll could have structured questions regarding from output government policies, networks, economic variables, perceived quality of education. Used this way, it allows the measurement of migration patterns, and identification of factors that influence students' study abroad decisions. Regression statistics and descriptive statistics are used to explore the relationships between independent variables and the student mobility rate.

Primary data can tell only part of the story; reading secondary sources—such as institutional records and international organization reports (World Bank, 2022)—yields better context for international student mobility and trends. Combining primary and secondary data means that we are in a position to offer comprehensive coverage of how the education system has responded to migration trends (Findlay et al., 2018).

In this study, a cross-sectional design is used, a design in which data are collected on pupils at each point in time, which serves to illustrate migration trends and its effects on the educational system of Kathmandu metropolis.

The data will be processed with SPSS and Excel while careful ethical considerations are made on informed consent and confidentiality to serve the participants privacy and integrity.

8. Research Framework



9. Research Hypotheses

H1: Each unit decrease in the perceived level of quality of education in Nepal has a substantial positive relationship with the percentage of students who migrate out of Kathmandu.

H2: The student migration rate from Kathmandu where studying abroad has a higher economic cost is positively associated with studying abroad.

H3: Social networks, especially those influenced by family, are significant determinants for the decision to migrate to pursue higher education and professional aspirations.

H4: Less government policies and no scholarships in Nepal lessen the ability to retain students, leading to increased migration rates.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.764[a]	.583	.579	.51732	1.498

a. Predictors: (Constant), Government_Policies_and_Scholarship_Availability, Perceived_Quality_of_Education_in_Nepal, Economic_Factors, Social_Networks_and_Familial_Influence

b. Dependent Variable: Student_Migration_Rate

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	146.944	4	36.736	137.268	<.001[b]
	Residual	104.908	392	.268		
	Total	251.852	396			

a. Dependent Variable: Student_Migration_Rate

b. Predictors: (Constant), Government_Policies_and_Scholarship_Availability, Perceived_Quality_of_Education_in_Nepal, Economic_Factors, Social_Networks_and_Familial_Influence

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.417	.094		4.445	<.001
	Perceived_Quality_of_Education_in_Nepal	.130	.039	.151	3.356	<.001
	Economic_Factors	.553	.056	.613	9.912	<.001
	Social_Networks_and_Familial_ Influence	-.075	.057	-.083	-1.325	.186
	Government_Policies_and_ Scholarship_Availability	.184	.070	.144	2.616	.009

a. Dependent Variable: Student_Migration_Rate

According to the Model Summary (R2 = 0.583) the four independent variables (perceived educational quality, economic factors, social networks and familial influence, and government policies and scholarship availability) explain 58.3% of the variation in student migration rates. The model fits the data reasonably well, with an adjusted R2 of 0.579 and a Durbin-Watson statistic of 1.498, and there is no apparent autocorrelation in the residuals. The prediction accuracy is moderate, with the standard error of the estimate (0.51732)

The results of the ANOVA table show that the predictors as a whole have a statistically significant impact on the student migration rate ($F = 137.268$, $p < 0.001$) The square of the error is referred to as the residual sum of squares (104.908), and the variance explained by the model is referred to as the regression sum

of squares (146.944). This shows that the model provides a complete understanding of the factors effects student mobility.

10.Reliability Test

Variables of Study	No. of items	Cronbach's Alpha
All variables	25	0.956
Student Migration Rate (DV)	5	0.808
Perceived Quality of Education in Nepal (IV)	5	0.855
Economic Factors (IV)	5	0.909
Social Networks and Familial Influence (IV)	5	0.892
Government Policies and Scholarship Availability (IV)	5	0.864

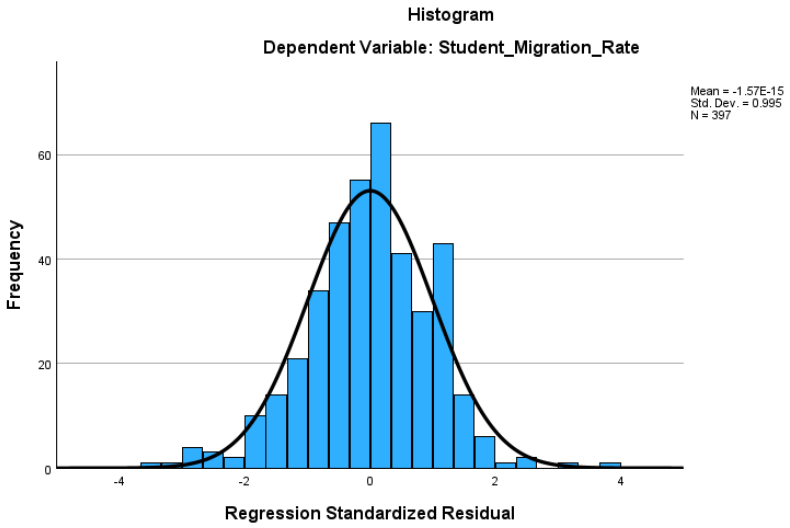
Cronbach's Alpha of the study is 0.956, well above the acceptable low threshold for 25 items. Finally, the Cronbach's Alpha of each variable: Student Migration Rate (0.808), Perceived Quality of Education in Nepal (0.855), Economic Factors (0.909), Social Networks and Familial Influence (0.892), and Government Policies and Scholarship Availability (0.864) show a good internal consistency.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Student_Migration_Rate	397	1.00	4.80	2.1264	.79749
Perceived_Quality_of_ Education_in_Nepal	397	1.00	5.00	2.6368	.92658
Economic_Factors	397	1.00	5.00	2.0781	.88320
Social_Networks_and_ Familial_Influence	397	1.00	5.00	2.2040	.88088
Government_Policies_ and_Scholarship_Availabili ty	397	1.00	3.60	2.0741	.62527
Valid N (listwise)	397				

Descriptive statistics indicate variation in educational characteristics and student mobility. With a mean of 2.13 (SD = 0.80), substantial variation is evident within the student migration rate. Nepal's perceived quality of education has a mean score of 2.64 (SD = 0.93), indicating a variety of opinions. Apart from Economic Factors, Social Networks, and Familial Influence show moderate variability with average (2.08–2.20) and standard deviation of about 0.88. The least variable are government policy and scholarship (mean = 2.07, SD = 0.63).

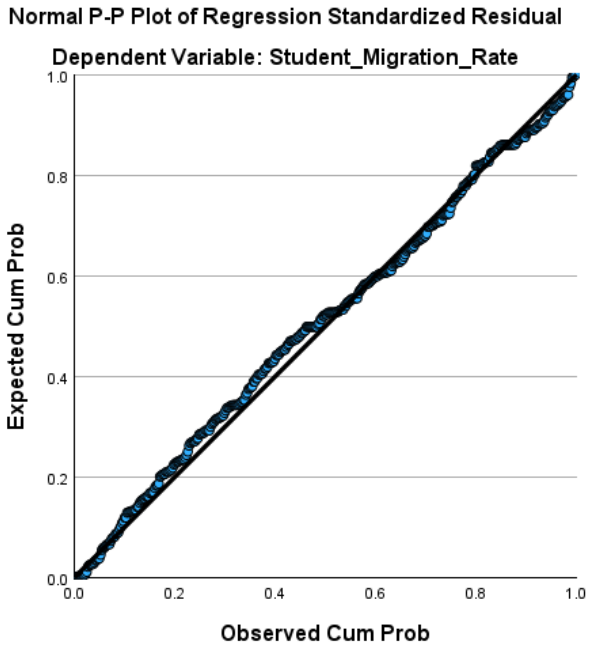
11.Normality Test



Distribution of regression standardized residual for the dependent variable "Student_Migration_Rate. Overlay curve indicates that the form of histogram is very similar as normal distribution I got a standard deviation of 0.995 for the residuals, and a mean of approximately -1.57E-15, which is much like 0. 397 is the sample size (N). This means that the residuals are centred around 0 and have an

approximate width of 1, which can be understood as assumptions of the model being reasonably satisfied.

Regression Analysis



Normal P-P Plot of Regression Standardized Residuals The Normal P-P Plot of Regression Standardized Residuals shows if the errors (residuals) for a regression model have a normal distribution. This graphic compares the expected cumulative probability from the normal distribution with the observed cumulative probabilities. If the data points follow the red 45-degree diagonal line closely, the residuals are approximately normal. Normality is an important assumption for a good regression, and this assumption is (mostly) satisfied as evidenced by most of the points lying on the line in the plot.

12. Results of Hypothesis

Import hypothesis 1 (H1): The decrease in the quality of education in Nepal transmits more students to migrate to Nepal.
Supported — Those students that believe Nepal's education quality is poor are more inclined to opt for educational studies aboard. Statistical analysis show very high association ($p < 0.001$) between these two.

Hypothesis 2 (H2): As studying abroad becomes more expensive, student migration decreases.
Not Supported Interestingly enough, for economic reasons, students migrate for higher paying job opportunities abroad despite the high costs ($p < 0.001$).

Hypothesis (H3): Students' social networks, comprising of friends and family members, influence their intention to study abroad.
Not Supported: Social Networks did not significantly drive Migration decisions ($p = 0.186$)

Hypothesis 4 (H4): Poor government efforts and a lack of scholarships lead to increase in student migration

Supported: Migration is rooted in poor policy and a scarcity of scholarship opportunities.
The study also showed that migration is most strongly predicted by perceived educational quality and by economic factors. But social and familial pressures were limited.

13.Interpretation of findings

The reasons stated in the report for students leaving the capital is due to excellent chances beyond Kathmandu and disappointment along with the edification system. Over 90.7% of respondents cited lack of research opportunities, financial constraints and better job prospects abroad as reasons. Quality of education, economic conditions and government policies were some of the other important drivers of migration. What's interesting about this is that social networks seem to have played little to no role in determining who migrated, suggesting a systemic, rather than interpersonal, component to this phenomenon.

The results are a wake-up call for Nepal's higher education system. The perceived shortcomings of home country education (e.g, outdated curricula; stale research infrastructure) were among the primary reasons for migration. The costs of migration were outweighed by the perception of better economic prospects elsewhere. The report also cited the role of insufficient scholarships and bad policies in brain drain. In order to reverse this, Nepal should work up to reform its education system, intensify industry-academia collaboration and come up with policies to retain talents and also check the outflow of students so that the country can get the maximum of its resources.

14.Conclusion

And the findings indicate that the primary draw factors of international student migration from Kathmandu are the low perception of education quality in Nepal and the potential of better economic opportunities abroad. The study confirms that higher earning potential abroad serves as an incentive to migration for students, although some students are prevented from migrating by financial barriers, outdated curricula, weakness of research facilities and a lack of alignment with industry seems to be a pushing factor. Looser government regulations, such as the underfunding of scholarships and the lack of the regulation of education consultancies, exacerbate the trend and create a substantial loss of intellectual capital and brain drain.
The results challenge received ideas about community-based migration by illustrating how at best, social networks have a minimal role when it comes to migration decisions. And adjacent public schools also face serious consequences — declining enrollment, teacher turnover and shaky finances. Because of these challenges, it becomes challenging for Nepal to sustain its system of higher education and enhance national development.
The curriculum, scholarships and policies must be updated which will challenge these sectors forcing students studying abroad to return to Nepal to tackle these issues. Simultaneously, implementing such measures can aid Nepal's educational system and mitigate the adverse consequences of outbound migration.

15.Recommendations

Modernization of the Curriculum: A national task committee of educationists, business executives and international experts should assess and revise/refocus the curriculum. Courses of Studies must be aligned

and in accordance with globally acceptable standards and labor market demands with an added emphasis on Life Skills, Entrepreneurship and Technology especially STEM subjects.

- Increase the number of government-funded scholarships for deserving Nepali students. Partner with industries to create sector specific scholarship programs.

- INCREASING RESEARCH INFRASTRUCTURE:In order for quality research to flourish, investments will need to be made in building, renovation, and academic rewards in Nepalese higher learning institutions.

- Betterment of government policies by placing strict rules on the education consultancies, providing tax benefits or preferential government jobs to graduates who return to Nepal.

- Business-Academia Partnerships: Inform business and college to make sure their curricula are relevant and provide students with job opportunities that suit the requirements of Nepal's labor market such as internships and funded research projects.

In addition, these will also help to boost national growth, retain human resource in Nepal, strengthen the education system of the country and reduce the negative spillovers of student migration.

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