

## DETERMINANTS OF INTERNAL MIGRATION FOR TERTIARY STUDENTS: STRUCTURAL EQUATION MODELLING STUDY IN KLANG VALLEY, MALAYSIA



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### ABSTRACT

#### Article History

Received: 18 March 2022

Revised: 13 May 2022

Accepted: 27 May 2022

Published: 10 June 2022

#### Keywords

Internal migration  
Structural equation modeling  
Social factor  
Family factor  
Economic factor  
Government factor  
Malaysia.

In developing countries like Malaysia, internal migration from rural areas to urban centers causes an imbalance in population distribution and its subsequent negative externality. This creates an urgent need to identify factors affecting internal migration. This paper examines the determinants of internal migration on tertiary students' decision-making within the Klang Valley, Malaysia. The dependent variable is the internal migration decision making and the independent variables are the social factor, miscellaneous factor, family factor, economic factor, and government factor. Data were collected through survey questionnaires. The Partial Least Squared type of Structural Equation Modelling is applied. Findings reveal family factors, miscellaneous factors, and social factors have significant impacts on internal migration decision-making. The economic factor has a significant relationship with social factors, while the government factor has a significant relationship with both miscellaneous and economic factors. Each factor in this study has either a direct or indirect impact on internal migration decisions.

**Contribution/ Originality:** Research on migration in Malaysia often focuses on the macro level, ethnic factors, and respondents that had migrated to the city. This research is filling the gaps by targeting potential migrants from tertiary students based on their personal perceptions. This is an important niche research area.

## 1. INTRODUCTION

Migration is defined as “encompassing the movement of human beings from their place of origin in order to reside in a new location, either temporarily or permanently” (Hickey, Narendra, & Rainwater, 2013). Internal migration between rural and urban areas or urban to urban areas had gained great demographic significance in the developed and developing world. It is also a global occurrence in a city that increases intense growth, hence rapid urbanization (Rashid & Ghani, 2009). An individual's intention to migrate to another state is mainly due to the push and pull factors. People migrate because income and job opportunities available in another area are better than what is accessible in their town. More facilities and amenities in healthcare, leisure, and transportation do attract immigration. Being an administrative or religious center also pulls in migration (Tey, 2014). Furthermore, universities or colleagues are also a powerful attraction to migration inflow. Increasing enrollment in tertiary

education forces students to move to urban centers for study, in which they may continue to stay beyond completion of their studies (Tey, 2012).

In the past, internal migration was often explained as the flows of migrants from rural areas to the cities of a country. The push and pull factors of migration caused the movers to relocate to better surroundings that they prefer. Reasons to leave can be due to economic factors, social and cultural factors, political factors, and so on. Rapid urbanization is happening in most developing countries. Although urbanization is a good symptom of a country's development and improvement, rapid urbanization especially in developing countries has caused certain targeted cities to be overpopulated and social problems can arise. Large unplanned immigration into the city may hinder the achievement of the "Sustainable cities and communities" of the Sustainable Development Goals (SDG-11). According to the (United Nations Development Program (UNDP), 2022) more than 50% of the population stays in the city currently and this percentage is expected to increase to two-thirds by 2050. The consequences of overpopulation are pressure or harm to nature's sustainability, biodiversity, weather, and natural resources. In Malaysia, a city space like the Klang Valley area is the targeted area for movers from rural areas to live. There will be a high possibility that graduates that originate from other states that are currently pursuing their education in these states will decide to permanently stay in the Klang Valley areas. Thus, it's important for the public and government to know the youths' motive to move and to implement useful government policies that can cope with the problems of overpopulation in Klang Valley and potential aging population issue in the rural areas.

Research on internal migration has been conducted by many researchers in various countries with different methods such as Salam, Azad, Salam, and Islam (2020) on Bangladesh, Iqbal, Baig, Hyder, Hasnain, and Nawaz (2016) on Pakistan, Black et al. (2022) on West Africa and Curiel, Domínguez, Lora, and O'Clery (2022) on Columbia. However, very few researches focused on migration intention of tertiary students like Santelli, Ragozini, and Vitale (2022) on Italy and this paper on Klang Valley in Malaysia. Tey (2012); Tey (2014) conducted similar studies but more focused on overall migration and the ethnical factor. It's important for countries to understand the patterns of migration to have proper planning for country development. In Malaysia, research on internal migration has been done by several researchers, but the information provided may have changed due to the passage of time. Besides, research on internal migration focusing on tertiary level students has not been carried out before in Malaysia. It's important for the public, government, and non-profit organizations to know the pattern of migration and factors to foster a balanced distribution of the people and the sustainable development of the areas.

The aim of this research is to provide a clear idea of the migration intention of tertiary-level students upon completing their studies. The factors that will be analyzed affecting the internal migration decision are economic factors, social factors, family affiliation factors, government policy factors, and miscellaneous factors. In addition, this research is conducted in a way that can project a clear understanding and view of the factors that influence the decision-making of internal migration. This study will also investigate the effect of government policy in influencing the migration intention of tertiary-level students. Government policy plays a major role in developing the economy of a country and reduction in society's poverty. Thus, it is important to understand and investigate the government policy's effects on internal migration in Malaysia.

## 2. LITERATURE REVIEW

Internal migration is a major focus for a country, especially for the study of urbanization in a developing country. It plays an important role in population distribution and state development. Internal migration is actively happening in the Klang Valley areas. Internal migration has attracted more attention with the issues of heavy in-migration. This has led Klang Valley areas to be congested due to these areas that are more focused on the development of education, commercial, and administration. There are many reasons that caused internal migration to happen. It includes several factors such as economic, social, political, cultural, environmental, health, education, transportation, and so on. Collectively, these factors offer a higher quality of life that attracts potential migrants

(Salam et al., 2020). Economic inequality is an important reason that causes internal migration to happen. According to Gallup (1996) economic growth occurs unevenly across the regions of a country. Due to these reasons, it is frequently seen that graduate students leave their homes and search for better job opportunities in the city. Migration decisions for young people are critical decisions in life. Social factors also play an important role during the decision-making for migration. Social push factors can include ethnic, religious, racial, and cultural persecution. The research of Martiskova (2013) shows that the younger generation often wants to have life experience abroad or familiarization with a different culture.

Composite interpersonal relations also can have an indirect effect on making the decision to migrate. Interpersonal factors such as family and friends can have an impact on making migration decisions. Affiliation which is the utility of living near family members or being part of a group or community is important to the value expectancy theory (Haug, 2008). Political factors are important general groups that influence the act of migration. Under political factors, government policy plays a vital role in affecting the migration decision of the people. Internal migration from rural areas to urban centers has created a lot of pressure and consequences due to the large population inflow. The government is forced to develop policies to restrict the movement of people to reduce the pressure caused by migrants (Msigwa & Bwana, 2014). The miscellaneous factor is the presence of other factors or personal motives that can affect the migration decision. Presence of other factors such as help from relatives and friends, the desire to receive higher education, the closeness of cultural contacts, and cultural diversity (Kainth, 2009). Besides, geographical factors like distance, topographical features, weather, and climatic conditions including floods and droughts are also listed as miscellaneous factors that influence migration decisions.

There are many migration theories that have been reviewed and used in explaining migration. Neoclassical Economic Theory is one of them. It indicates that the original movement of an individual is due to income maximization. This shows that the economic conditions like differentials in incomes, employment opportunities, and migration costs between two geographical locations will have a big impact on influencing individual decisions on migration. According to Todaro, this theory suggests that migration by geographical differences is related to the global supply and demand for labor (Martiskova, 2013). At the macro-level, income differences between different locations prompt individuals to move from low wage areas to high wage areas. In other words, it can be explained by the movement of labor surplus regions to labor scarce regions (Haas, 2008). While at the micro-level, Neoclassical Economic Theory views migrants as individuals who will make migration decisions based on cost-benefit assumptions (Haas, 2008). Migrants will be moving to places that they expected and assumed to be most productive for them based on their free choice. This migration theory views rural-urban migration as a part of the whole development and urbanization process.

According to Lewis's surplus labor model, the economy is divided into two sectors, which are the subsistence sector (traditional sector) in the rural areas and the modern sector in the urban centers (Har, Tan, & Lim, 2008). From this concept, the inefficiency of utilizing human resources happened because surplus labor is believed to exist in the subsistence sector. Thus, to boost industrialization and development it is best to move the surplus labor to modern urban areas. Indeed, this rural to urban migration that linked with economic sectors, productivity and employment has long been conceptualized by Todaro (1969) which is more commonly known as the Harris-Todaro migration model. According to the model, relatively high permanent incomes in the urban areas will continue to attract the inflows of rural migrants if the expectation of rural-urban wages differential remains high enough to outweigh the risk of being unemployed (Har et al., 2008). However, it is not possible due to the presence of institutional factors such as government and labor unions in wage determination. Neo-classical migration economy provides two migration models. First, Lewis's migration model shows that under-employment in rural areas will encourage migrations to urban areas. Second, Harris-Todaro's migration model shows that due to institutional factors wages will not be equal to expectations and thus resulted in unemployment in urban areas. The first "Laws of Migration" is the other migration theory that was formulated in two articles by Ernest Georg Ravenstein in the

Nineteenth Century. It's the oldest concept of understanding migration. The concept of migration by Ravenstein was an inseparable part of development and he stated that the major causes of migration were economic (Haas, 2008). As migration studies became more detailed, factors like distance and population density are considered to influence migration patterns (Haas, 2008). Ravenstein (1885) also mentioned that as the amount of migration reduces with longer distances; migration transpires in different phases; populace movements are bilateral; and migration differentials in gender or social class can affect an individual's mobility (Martiskova, 2013). Despite This shows the underlying assumptions of push-pull theories. A new analytical framework of Ravenstein's "Laws of Migration" was subsequently revised and stated that other influences like factors associated with the area of origin and area of destination such as distance, physical barriers, immigration laws, personal factors, and so on will determine the decision to migrate (Haas, 2008). This analytical framework is commonly referred to as the "Push-Pull" model and it has gained popularity and become the dominant migration model in migration study. A simple explanation of this model can be defined as an individual choice that various factors like environmental, demographic, and economic can determine migration decisions (Haas, 2008). Push factors are factors that push or force people to leave due to problems occurring. These factors are usually unfavorable things such as unemployment, underdevelopment, and lack of opportunities, social problems, natural disasters, and many more. Pull factors entice people to a different area for better prospects. These factors are usually favorable things such as high employment and salary, better economic conditions, high productivity, facilities and development, a high level of education, and so on. Push factors and pull factors are equally important as the push factors forced the migration to happen and are simultaneously pulled by the expectation of better findings in other places (Kainth, 2009).

### 3. METHODOLOGY

This is qualitative research, and the questionnaire will be the primary resource. The target population of this research will be tertiary level students who are expecting to graduate soon and are from other states in Malaysia that are currently pursuing their tertiary level education in the Klang Valley areas. The tertiary levels of the students include foundation, degree, master, and Ph.D. levels. However, all tertiary level students who originate in Klang Valley or both parents and family have permanently stayed in Klang Valley areas are excluded. The sampling location will be narrowed down to the Sungai Long and Cheras areas as including all areas in Klang Valley will be too broad to study due to limited resources. The haphazard sampling method is chosen for this research. All information collected is through the respondent which was relatively easy to access. There are a total of 254 sets of data collected from target respondents through personal distribution and online survey methods. A total of 36 questions were asked for this survey and categorical and scaled questions were used. Survey questionnaires were divided into 4 sections. The questions in each section are, Section A, related to respondents' biography, Section B, related to the migration intention in the foreseeable future, Section C questions related to family affiliation factors, Section D, factors that will affect respondents' migration decisions and Section E, factors of government policy that will affect the migration decision. Thirty sets of questionnaires were distributed to respondents as a pilot study. Data from the pilot test was analyzed using the Partial Least Square (PLS) method. Results from the pilot study were then analyzed and evaluated to test the accuracy and reliability of the survey questionnaires. Alterations were made according to the corrections and feedback from respondents. Descriptive analysis and inferential analysis were practiced in this research. Descriptive analysis is used to analyze respondent demographic profile while inferential analysis that used the Partial Least Square Structural Equation modelling (PLS-SEM) approach were used to analyze the relationship between indicators and factors.

### 4. DATA ANALYSIS

Respondents' demographic profiles were analyzed using frequency analysis. They are gender, ethnicity group, academic areas, and working experience during university courses. The total number of respondents is 254 with the

percentage of females (58.27%) being higher than males (41.73%). There are five different ethnic groups of respondents. The majority are Chinese, Indian and Malay followed by others (*Bumiputera* and non-*Bumiputera*) and foreigners. Most respondents are art streams students that have an accountancy and business background. More than 50% of the respondents had working experience during their college life.

**Table 1.** Convergent validity for reflective construct.

Latent variable	Indicators	Factor Loading	Composite Reliability	Average Variance Extracted (AVE)
Decision	Intention	0.668	0.803	0.506
	Marry	0.726		
	Move	0.678		
	Stay	0.769		
Family	Expectation	0.625	0.736	0.488
	Family	0.604		
	Parents	0.841		
Government	Development	0.823	0.919	0.695
	Financial	0.819		
	Healthcare	0.829		
	ICT	0.856		
	Infrastructure	0.84		

#### 4.1. Convergent Validity

Convergent validity reflects the extent to which indicators of the specific construct are interrelated (Santhanamery & Ramayah, 2014). In general, it refers to whether indicators from a latent variable do belong to that latent variable. Table 1 shows the convergent validity of the reflective construct and is assessed by assessing the loadings, composite reliability, and average variance extracted (AVE). According to Santhanamery and Ramayah (2014) factor loadings and AVE of higher than 0.5 and composite reliability (CR) higher than 0.7 is acceptable. So, the results show that factor loadings and composite reliability are at an acceptable level. AVE was at 0.488, which is below 0.5. However, AVE is said to be acceptable at 0.4 and higher if Composite Reliability is more than 0.6 (Huang, Wang, Wu, & Wang, 2013). Thus, the convergent validity of the construct is adequate.

**Table 2.** Convergent validity for reflective construct.

No.	Label	Outer Weight	t-statistic	p-value	Outer Loading	t-statistic	p-value
1	Cost → Economic	0.200	2.430	0.015	0.678	11.052	0.000
2	High → Economic	-0.115	1.001	0.317	0.708	9.607	0.000
3	Standard → Economic	0.389	3.651	0.000	0.764	8.619	0.000
4	Opportunities → Economic	0.488	4.635	0.000	0.851	18.655	0.000
5	Support → Economic	0.317	2.998	0.003	0.736	10.998	0.000
6	Environmental → Miscellaneous	0.557	1.837	0.066	0.616	2.051	0.040
7	Friends → Miscellaneous	0.163	0.486	0.627	0.589	2.503	0.012
8	Relatives → Miscellaneous	0.702	1.737	0.082	0.799	2.580	0.010
9	Primitive → Social	0.077	0.844	0.399	0.560	6.694	0.000
10	Social network → Social	0.079	0.960	0.337	0.553	6.597	0.000
11	Urban_life → Social	0.053	0.732	0.464	0.491	5.819	0.000
12	Work_life → Social	0.322	3.094	0.002	0.723	10.292	0.000
13	Entertainment → Social	0.108	1.300	0.193	0.635	8.636	0.000
14	Facilities → Social	0.435	4.248	0.000	0.850	14.755	0.000
15	Lifestyle → Social	0.169	1.753	0.08	0.798	14.048	0.000
16	Safety → Social	0.110	1.240	0.215	0.740	10.835	0.000

Note: Significant tests at 1% level, 5% level, and 10% level were conducted using bootstrapping (5000 samples).

Table 2 shows the convergent validity of the formative construct. Based on the results shown, only (numbers 1,3,4,5,6,8,12,14,15) are at a significant level, 5%,1%,1%,5%,10%,10%,5%,1%,10% respectively, while the others are not significant at any level. Therefore, according to Hair, Hult, Ringle, and Sarstedt (2016) if the indicators are not significant at the respective significant level, we may look at the t-statistic (more than 1.96) and p-value of outer loading of the formative construct. If they are significant at their respective levels and based on prior research and theory also provide support for the relevance of the indicators that capture the latent variable, then the outer weight should be retained instead of removed. Thus, when looking at the outer loading of the formative construct, t-values were all significant and all their p-values were significant at 1% and 5%, so convergent validity is established.

Table 3. Discriminant validity for reflective construct.

Determinants	Decision	Family	Government
Decision	0.711	-	-
Family	0.546	0.698	-
Government	0.063	0.084	0.833

#### 4.2. Discriminant Validity for Reflective Construct

Table 3 shows the result for the discriminant validity for a reflective construct which is defined as that the construct is different with other constructs. To conduct discriminant validity, the square root of AVE from the respective construct is compared against the correlations of the other constructs and when the value of squared root AVE is greater than other constructs then discriminant validity is established. For example, the latent variable Family's AVE was found to be 0.488 (from Table 4) and its square root becomes 0.698. This number is greater than the value in the column and row of Family (0.084, 0.546). A similar observation is also made for latent variable Decision and Government. Thus, results showed that discriminant validity is established.

Table 4. Outer VIF.

Constructs	Indicators	VIF
Economics	Cost	1.625
	High	2.688
	Standard	1.586
	Opportunities	2.681
	Support	1.655
Miscellaneous	Environment	1.039
	Friends	1.314
	Relatives	1.27
Social	Primitive	1.578
	Social	1.517
	Urban life	1.373
	Work-life	1.813
	Entertainment	1.745
	Facilities	2.016
	Lifestyle	2.453
	Safety	2.126

#### 4.3. Collinearity Issue (Formative Construct)

Table 4 shows the results of collinearity statistics for indicators in formative construct and it indicates that there were no collinearity problems as the VIF value is below 5. It shows that the indicators are not correlated to each other as stated earlier.

4.4. Structural Model

This sub-section represents the relationship between the construct in the model through the estimation of path coefficient and  $r^2$  value which indicate the overall model goodness of fit as shown in Figure 1. Both Figure 1 and Table 5 show the results of the model. Family ( $\beta = 0.515$ ,  $p < 0.01$ ) and Social ( $\beta = 0.2$ ,  $p < 0.1$ ) are positively related to internal migration decisions and Miscellaneous ( $\beta = -0.148$ ,  $p < 0.1$ ) has negative relationship towards internal migration decisions. However, Government ( $\beta = 0.022$ ,  $p > 0.1$ ) and Economic ( $\beta = -0.087$ ,  $p > 0.1$ ) were not a significant predictor of internal migration decisions in our research. All these latent variables had explained 31.7% of the variance in internal migration decision.

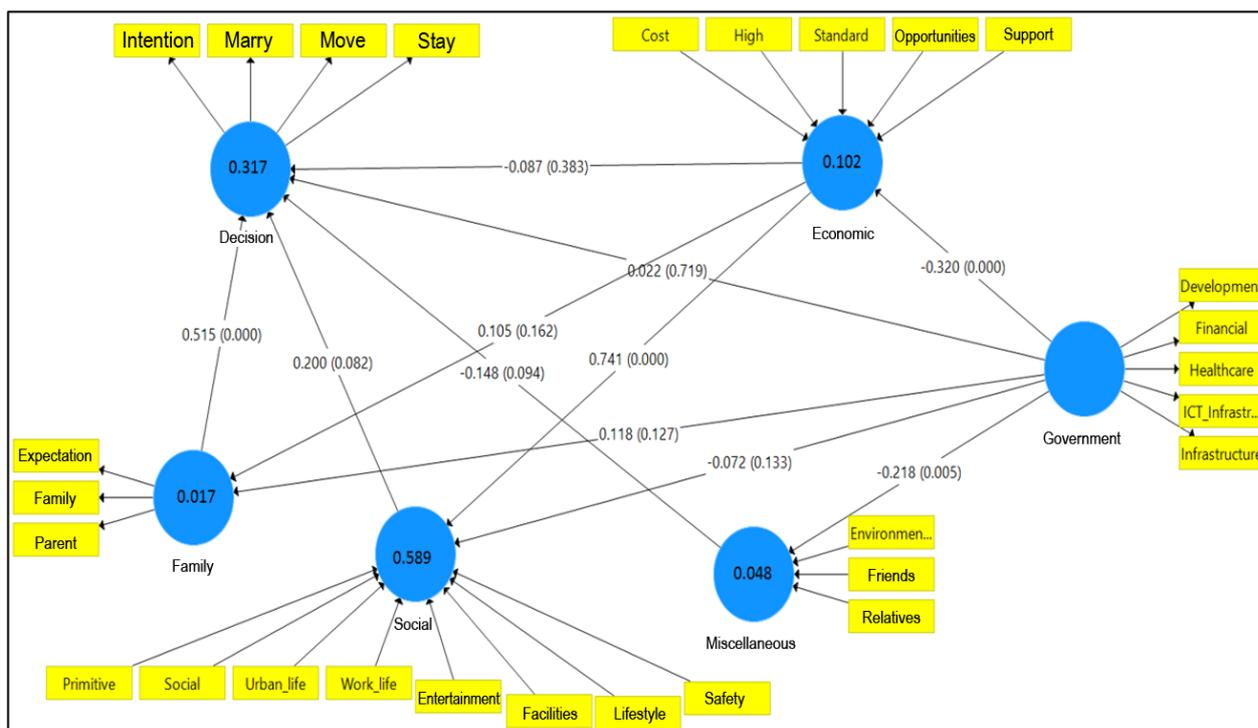


Figure 1. Structural model.

Table 5. Structural model result.

Descriptions	Path Coefficient	T-Statistic	P-Value
Economic → Decision	-0.087	0.873	0.383
Economic → Family	0.105	1.398	0.162
Economic → social	0.741***	16.139	0.000
Government → Decision	0.022	0.36	0.719
Government → Economic	-0.320***	4.21	0.000
Government → Family	0.118	1.528	0.127
Government → Miscellaneous	-0.218***	2.795	0.005
Government → Social	-0.072	1.503	0.133
Family → Decision	0.515***	9.752	0.000
Miscellaneous → Decision	-0.148*	1.674	0.094
Social → Decision	0.200*	1.737	0.082

Note: \*\*\* and \*\* indicate significant at 1% level and 10% level, which are obtained using bootstrapping (5000 samples).

Other latent variables also have relationships with each other which affect the internal migration decision making. It was shown that the Economic construct ( $\beta = 0.741$ ,  $p < 0.01$ ) has a significant impact on the social construct only, but no significant impact on family ( $\beta = 0.105$ ,  $P > 0.1$ ) and Government construct ( $\beta = -0.072$ ,  $p > 0.1$ ). The government has significant impacts on all latent variables, but our research only found it has a significant

impact on Miscellaneous construct ( $\beta = -0.218$ ,  $p < 0.01$ ) and Economic construct ( $\beta = -0.32$ ,  $p < 0.01$ ) yet no significant results towards Family ( $\beta = 0.118$ ,  $p > 0.1$ ).

## 5. FINDINGS AND DISCUSSION

From the research we conducted, three out of five independent variables have significant impacts on internal migration decisions. The family factor has the strongest impact on internal migration decisions followed by a social factor with both having positive relationships toward internal migration decisions. The miscellaneous factor, too, has an impact with a negative relationship on internal migration decision-making. Whereas economic and government factors show no impact or in other words they are insignificant towards internal migration decisions. However, the research shows that the economic factor has an impact on the social factor. From here, we predict that a good economic system determined the social factor which eventually leads to internal migration decisions from their respective birthplace or hometown. The "Family" factor shows the strongest impact on the internal migration decision of tertiary students in our exploratory research. If students wish to migrate away from their respective home towns to one of the cities within Malaysia, they must build a strong trust between them and their parents to get their approval. Regardless of how good the economic status of the city is, parents' approvals are the priority. Besides, employers can consider the prospect of work-life balance other than giving high salaries to attract future graduates to move from their hometown to the respective location of the workplace and vice versa. This is because the factor loading of this indicator in the social factor represents high importance towards the factor where the value is (0.723). If the employer does not provide a 'time out' for their employees, it will be hard to retain them or attract new employees to work for them.

This research has several natural constraints. First, the honesty and seriousness of respondents are always the common limitations for primary data. Some of the respondents may not take completion the survey questionnaire seriously. This may be due to the uncomfortable and security issues of respondents providing their personal thoughts to other parties in an unfavorable manner. Additionally, due to time constraints, it was too difficult for the researcher to reach out to every target respondent in the sampling frame. It is difficult to exactly identify tertiary-level students that originate from other states in Malaysia. In Klang Valley areas, there is an estimated population of 5.1 million, and this figure is too large for the researcher to reach out to every tertiary student. To have more valuable and informative data, there are a few suggestions given for future researchers. First, the survey questionnaires were distributed mainly only in Sungai Long and Cheras areas. However, these two areas are not large enough to represent the whole Klang Valley area. Thus, it is suggested that other researchers may carry out similar studies, but cover a bigger area such as Klang, Gombak, Sepang, Putrajaya, Cyberjaya and so on. To have a more reliable and valid result, future researchers are advised to enlarge the sampling size. The sampling size for this research was only 245 sets of data which can be considered small to study the whole Klang Valley area. With a larger sample size, researchers can have more accurate and effective data. Lastly, the researcher for this study may have omitted or forgotten to include some useful and important variables in identifying the migration decisions. Thus, it is advised that future researchers understand and insert more variables in testing respondents' migration decisions.

## 6. CONCLUSION

In this research, the main objective was to determine the factors that affect migration decisions for tertiary-level students. The study was conducted using primary data through survey questionnaires. A total of 245 survey questionnaires were collected and data was processed. The Partial Least Squared method was used to conduct the analysis for this research. In conclusion, the research objectives in this study had been reasonably achieved as the results show that family affiliation factors, social factors, and miscellaneous factors can affect internal migration

decisions. Results from this research can be useful for students and the government to understand the patterns of internal migration.

**Funding:** This research is supported by Anbound (Malaysia) Research Center (Grant number: 4394/000).

**Competing Interests:** The authors declare that they have no competing interests.

**Authors' Contributions:** All authors contributed equally to the conception and design of the study.

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## APPENDIX

### Appendix A – Survey Questionnaire

#### Section A

Please provide your personal details below as survey purposes.

1. Gender
  - Male
  - Female
  
2. Age (as last birthday) \_\_\_\_\_
  
3. Ethnicity group
  - Malay
  - Chinese
  - India
  - Others (Bumiputera)
  - Others (Non-Bumiputera)
  - Foreign resident
  
4. What is your place of origin?  
State: \_\_\_\_\_  
Town: \_\_\_\_\_  
Postcode: \_\_\_\_\_  
Village/Residential area: \_\_\_\_\_
  
5. Year of study: \_\_\_\_\_ Semester: \_\_\_\_\_
  
6. Foundation / Degree / Master or PhD / Others (please circle)
  
7. In what academic area is your undergraduate degree? Check more than one area, if applicable.
  - Medicine and Human Sciences
  - Business Administration, Management, Marketing, Economics
  - Accountancy, Actuarial Sciences
  - Arts, Social Sciences and Education
  - Agricultural Sciences and Natural Resources
  - Engineering and Built Environment
  - Architecture
  - Fine and Performing Arts
  - Journalism and Mass Communication
  - Public Affairs and Community Service
  - Life and Physical Sciences

- Law
  - Others (please specify) \_\_\_\_\_
8. Did you work (excluding internship) during your university course?
- Yes
  - No
9. Where do you think your first job after graduation will be?
- Hometown
  - City in Malaysia (Please state: \_\_\_\_\_)
  - Overseas (Please state: \_\_\_\_\_)
  - Mobile (Flexible working anywhere)

**Section B**

Please answer the following statements using a scale of 1 to 5. Circle your answer.

- 1 = No intention at all / plan to work in hometown
- 2 = Likely will not
- 3 = Not sure (neither yes nor no)
- 4 = Likely will
- 5 = Certainly

Table 1 Presents questions on intention to move to city.

Table 1. Questions on intention to move to city.

No.	Statements	Scale				
1.	Do you have the intention to work for at least a certain amount of years at city (away from hometown) in near future?	1	2	3	4	5
2.	Do you have the intention to move your family (parents) to city you work in near future?	1	2	3	4	5
3.	Do you think you will marry and have your own family in city you work in near future?	1	2	3	4	5
4.	Overall, do you expected to stay in city for long term / permanently?	1	2	3	4	5

**Section C**

Please answer the following statements using a scale of 1 to 5. Circle your answer.

- 1 = No intention at all / plan to work in hometown
- 2 = Likely will not
- 3 = Not sure (neither yes nor no)
- 4 = Likely will
- 5 = Certainly

Table 2 Presents questions on influence of family factor on migration decision.

**Table 2.** Questions on influence of family factor on migration decision.

No.	Statements	Scale				
		1	2	3	4	5
1.	Does your family expected you to work for at least a certain amount of years at city (away from hometown) in near future?	1	2	3	4	5
2.	Does your family have the intention to move to city to stay with you in near future?	1	2	3	4	5
3.	Overall, does your family expected you to stay in city for long term / permanently?	1	2	3	4	5

### Section D

When making migration decision as a college/university graduate to work in city or away from hometown, how important are (or were) the following factors in that decision? Please answer the statements using a scale of 1 to 5.

Circle your answer.

- 1 = Not important at all
- 2 = Unimportant
- 3 = Neutral
- 4 = Important
- 5 = Extremely important

**Table 3** Presents questions on factors impacting migration decision.

**Table 3.** Questions on factors impacting migration decision.

No.	Statements	Scale				
		1	2	3	4	5
1	To be close to relatives	1	2	3	4	5
2	To be nearer to friends and acquaintances	1	2	3	4	5
3	Urban life experience	1	2	3	4	5
4	Work-life balance	1	2	3	4	5
5	Better chance of marrying	1	2	3	4	5
6	Social Network	1	2	3	4	5
7	Standard of living	1	2	3	4	5
8	Job opportunities	1	2	3	4	5
9	High paid job (better career prospects)	1	2	3	4	5
10	Cost of property	1	2	3	4	5
11	Finance support (government subsidized programs, company allowances, etc)	1	2	3	4	5
12	Healthcare, infrastructure services and facilities	1	2	3	4	5
13	Working lifestyle	1	2	3	4	5
14	Security and safeness	1	2	3	4	5
15	Environmental quality	1	2	3	4	5
16	Recreational and entertainment activities	1	2	3	4	5
17	Primitive conditions (tradition, conservative/open-minded thinking, customs, etc)	1	2	3	4	5

### Section E

Do you have any intention to return back to hometown (if working in city) when given these government developments. Please answer (circle) the statements using a scale of 1 to 5.

- 1 = Yes with strong intention
- 2 = Likely yes
- 3 = Not sure (neither yes nor no)
- 4 = Likely no
- 5 = Not at all

Table 4 Present questions on influence of government factor on migration decision.

Table 4. Questions on influence of government factor on migration decision.

No.	Statements	Scale				
1	Financial: Entrepreneurship programmes (financial support, government subsidies and sponsorship)	1	2	3	4	5
2	Healthcare: Build and upgrade new hospitals and clinics	1	2	3	4	5
3	Infrastructure: Improve transportation facilities (MRT, East Coast Rail Line, Pan Borneo Highway in Sabah and Sarawak)	1	2	3	4	5
4	ICT Infrastructure: Upgrade and improve ICT infrastructures of rural area (digital programmes, e-commerce ecosystem, Digital Free Trade Zone)	1	2	3	4	5
5	Development: Set up industries (create job opportunities), Senior Citizen Activity Centres	1	2	3	4	5

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