Effectuate Out-migration Intention: Who Took Action among those Intending to Leave?

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Background

Migration intention offers valuable information for predicting long-term demographic change, even though it does not always materialize into action or behaviors (van Dalen et al., 2005). Migration intention can be defined as an individual's self-reported decision or stated preference to emigrate (Ajzen, 1991; van Dalen, Groenewold, & Schoorl, 2005). Starting with intention, out-migration can be conceptualized as a "cascade of stages", including preparatory action stage, actual departure stage, travel stage and eventually reaching the destination, i.e. a cognitive-to-behavioral process towards a goal as illustrated in the transtheoretical framework (DiClemente & Prochaska, 1998). Despite noticing the gap between migration intention and migration outcomes, few studies have investigated those intermediary stages (Gardner, De Jong, Arnold, & Cariño, 1985). To address this research gap, we expand our focus to investigate preparatory action stage, a stage immediately following the stated preference to emigrate (i.e., intention for out-migration). To that end, it is imperative to characterize the proportion of people taking preparatory actions among those who have stated their intention. Additionally, understanding factors or drivers of preparatory stage will help illuminate migration process as a whole and its selection mechanism. To operationalize this line of inquiry, we used out-migration data from Sub-Saharan (SAA) countries in this study as an example to empirically explore migration preparation stage.

Previous studies have thoroughly investigated individual-level factors associated with out-migration intention in SSA, such as younger age and being currently unemployed (Alabi & Olajide, 2023). Prospective economic gain after migration, due to the income disparity between the sending and receiving countries could also "pull" people to migrate out of their home countries in SSA(Hatton & Williamson, 2003)(Lee, 1966). At meso-level, having social network ties or family members who have already emigrated can encourage and facilitate out-migration as well(Gillespie & Mulder, 2020; Levitt & Jaworsky, 2007). Furthermore, psychosocial factors such as self-efficacy and optimism about migration, positively linked to increased intention for out-migration as well(van Dalen et al., 2005). Those aforementioned factors were also supported by qualitative evidence. One previous study presented a compelling case study on Senegalese emigration to Europe, underscoring the significance of economic insecurity, deteriorating living conditions in Senegal, and increased labor market opportunities during times of economic restructuring in Europe, together with the pivotal role of social network ties in facilitating this migratory flow (Baizán & González-Ferrer, 2016).

Those factors may or may not be associated with migratory preparation, which represents a sequential stage after migration intention and therefore should be separately assessed and critically compared with migration intention. Towards that goal, our study addresses the following research questions:

Q1. Among individuals with migration intentions, what is the **proportion** making preparatory actions for migration?

Q2. Are **certain sociodemographic variables** associated with preparatory actions, leading to further **selection**?

Q3. Is **previous exposure** to international migration (i.e., former experience of oneself or close relatives/friends traveling abroad) related to taking preparatory actions?

Q4. What **reasons to emigrate** motivate people the most to take action to move?

Methods

Dataset and measurement. We used secondary data publicly available from the Afrobarometer project, a repeated cross-sectional survey covering 33 SSA countries. Survey from Round 7 included questions

about emigration intention by asking “How much, if at all, have you considered to moving to another country to live?”. Response options are on a Likert scale, whereby “0=Not at all”, “1=A little bit”, “2=Somewhat”, “3=A lot”, “9=Don’t know/Haven’t heard enough” and refusal to answer. Migration preparatory action was measured by asking “How much planning or preparation have you done in order to move to another country to live?”. This question is only presented to those who reported at least some intention to emigrate. Responses to preparation question included an ordinal scale whereby “0= not currently making any specific plans or preparations”, “1= planning to move in the next year or two but not yet making preparations”, and “2= currently making preparations to move, e.g. getting a visa”. Respondents were also free to select “Don’t know/haven’t heard enough” or refuse to answer. Those were two major migration stage variables of interest in our analysis.

For individual-level explanatory variables, besides sociodemographic covariates proven to affection migration intention and outcomes (such as age, gender, rural or urban residence, and education level), we also explored perceived difficulty of emigration, as it echoes the concept of migration self-efficacy. Additionally, we also considered the variable about previous exposure to foreign living (by oneself or a close friend/relative), since it suggests information access about destination environment. For macro-level explanatory variables, we hypothesized country-level GDP per capita category and healthy life expectancy to explain variance in migration intention through an inversed relation. Those data were obtained from the World Bank database.

Furthermore, stated reasons for emigration, were recorded for those who intended to emigrate through the following question, “there are several reasons why people leave their home to live in another country for an extended period of time. What is the most important reason why you would consider moving?” Those reasons were categorized into: (1) economic pull, (2) economic push; (3) family development, (4) personal enhancement, (5) socio-political environment, (6) securities and safety, and missing data. See Table 1 below for recoding reference:

Table 1 Reasons to emigrate by subordinate categories

ECONOMIC PULL	ECONOMIC PUSH	FAMILY DEVELOPMENT	PERSONAL ENHANCEMENT	SOCIO-POLITICAL ENVIRONMENT	SECURITIES AND SAFET
Find work/better job/better work opportunities; Lower taxes at destination; Better business prospects	Economic hardship; Poverty/destitution; Poor infrastructure/service	Better schools for children; Better medical services for family; To accompany family members who are moving for work; To join spouse/family members who have already migrated	To pursue an education; Travel/tourism/adventure/experience other	Better democratic environment/personal freedom/human rights/civil liberties; Political persecution, cultures; Religious persecution	Natural disasters, including drought, disease outbreaks, flooding, etc.; Civil war/threat of civil war/violent conflicts; Crime, or personal/family insecurity

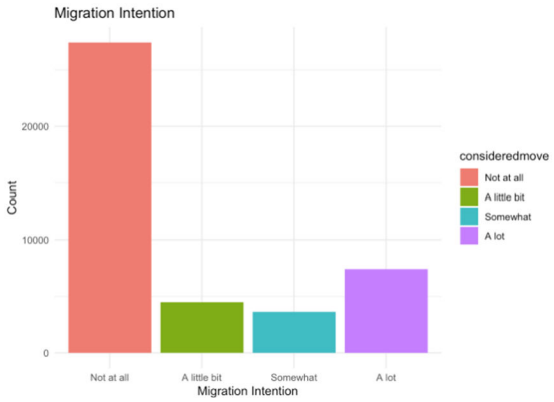
Analytical strategies. We first performed exploratory data analysis to examine sample characteristics, the distribution of migration intention by country, intra-class correlation by country regarding migration intention and preparatory action. Then, migration intention was re-coded as a binary variable and regressed on a series of sociodemographic variable including age, gender, education, urban residence, exposure to foreign living, perceived migration difficulty, country GDP per capita categories, and life expectancy at birth, all in univariate analyses. Similarly, univariate analyses were performed to assess the association between each of those variables and migration preparation.

Then, we ran a multilevel logistic regression of migration intention, adjusting for the same set of covariates in one multivariable model, taking into account country-level clustering. For comparison, we also incorporated the same set of covariates into the multilevel ordinal logistic regression model fitted with Laplace approximation. In addition, we included reasons for emigration as categorical variables in the model to assess the potential relation between motivation and action. All analyses were conducted on R and significance level was defined at $p<0.05$.

Preliminary findings

See table 2 for sample characteristics by country. A total of 32 SSA countries were included with the mode sample size at 1200 participant except for Ghana, Mozambique and Tanzania which have doubled sample sizes. The average age of participants ranged between 30 and 40 years old except for Guinea, Lesotho and Mauritius on the older side. The sex ratio is balanced but education level measured by elementary school completion varied substantially across countries ranging from greater than 98% to as low as 30%.

Majority of participants do not intend to emigrate at all. Study sample in Madagascar reported the lowest intention to emigrate at less than 14%, while the highest proportion with intention to emigrate was seen in Sierra Leone at about 58%. See Figure 1 below.



Most participants who reported intention to emigrate do not have any preparation at all; only very few ranging from .64% in Madagascar and 22.3% in Mali respectively reported currently making any preparation for the move.

Table 2 Sample Characteristics by Country

Country	Sample Size	Age (Mean)	Age (SD)	Age (Median)	Age (IQR)	Sex Ratio (Male:Female)	Education Level (% Finished Elementary School or Higher)
Benin	1200	35.82	14.07	33	20.00	1.00	61.58
Botswana	1198	38.71	15.33	35	20.00	1.01	86.64
Burkina Faso	1200	37.44	14.19	35	20.00	0.99	37.42
Cabo Verde	1200	39.69	16.97	35	28.00	0.98	91.50
Cameroon	1202	34.04	14.40	30	18.00	1.01	88.19
Côte d'Ivoire	1200	35.47	13.12	32	18.00	1.00	76.67
eSwatini	1200	37.75	15.89	33	22.00	0.99	91.33
Gabon	1199	33.93	12.30	31	16.00	1.00	98.58
Gambia	1200	36.06	14.94	32	21.00	1.00	59.75
Ghana	2400	37.82	15.26	34	21.00	0.99	83.54
Guinea	1194	40.42	16.61	38	27.00	1.00	41.88
Kenya	1599	36.16	13.65	32	17.00	1.00	91.68
Lesotho	1200	43.32	18.20	39	28.00	1.00	88.50
Liberia	1200	33.60	13.19	30	18.25	1.00	87.17
Madagascar	1200	39.64	14.87	38	23.00	1.00	88.58
Malawi	1200	35.87	15.15	32	19.00	1.00	87.67
Mali	1200	39.49	15.68	37	23.00	1.00	36.42
Mauritius	1200	45.02	15.54	45	24.00	1.00	98.25
Mozambique	2392	33.40	13.67	30	17.00	0.99	84.57
Namibia	1200	35.24	13.92	32	18.00	0.98	93.00
Niger	1200	38.55	15.24	35	24.50	1.00	30.00
Nigeria	1600	32.66	12.47	30	17.00	1.01	85.50
São Tomé and Príncipe	1200	36.31	14.63	33	20.00	0.99	96.75
Senegal	1200	37.34	15.16	34	23.00	0.99	53.75
Sierra Leone	1200	35.57	13.71	33	19.00	1.00	66.08
South Africa	1840	38.50	14.74	35	21.00	1.00	94.40
Sudan	1200	34.23	13.05	30	18.00	1.00	90.17
Tanzania	2400	37.96	14.83	35	21.00	1.00	86.88
Togo	1200	35.83	13.72	32	20.00	1.00	87.00
Uganda	1200	35.69	14.04	32	18.25	1.00	87.25
Zambia	1200	35.69	14.48	33	19.25	1.00	92.17
Zimbabwe	1200	39.04	16.00	35	23.00	0.99	93.67

In the univariate models, all covariates were significantly associated with migration intention, as well as migration preparations respectively. In multivariable logistic model, increasing perceived migration difficulty is negatively associated with migration intention; previous exposure to foreign living is positively associated with migration intention; rural residence is negatively associated with migration intention. Despite ICC greater than 0.056 suggesting country-level clustering, the two macro-level variables incorporated in the model, GDP and life expectancy, do not seem to relate to migration intention. All sociodemographic variables, such as age, gender, and education level relate to migration intention, consistent with existing evidence that people who are younger, male, with higher education, are more likely to have out-migration intention. In terms of a preparatory action, age and gender are significantly associated with migration preparation. Younger, male participants are also more likely to take actual actions towards their out-migration goal. It's very worth noting that education level plays a more subtle role in predicting preparatory action and the association is only statistically significant comparing secondary or higher education to no education. Similar findings were observed between migration preparation and a myriad of factors examined including perceived migration difficulty, previous exposure to living abroad, urban/rural residence, following the same direction as their association with intention. This finding suggest that those drivers not only ignite people's intention to move but also propelled them to take actions ensuite. When examining the stated reasons for emigration, we used economic pull factor as a reference category, and compared the other reason category in relation to taking preparatory actions. We found interestingly people whose migration reason was for family development were more likely to be making preparatory actions, for people who stated that their major reason to emigrate was for security, safety (such as war or natural environment) push factors, they were less likely to make actual actions.

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