

# FACTORS ASSOCIATED WITH THE OUTFLOW OF HIGH-LEVEL PHILIPPINE MANPOWER \*

Josefina R. Cortes

The exodus of Filipino professionals to the United States has been a subject of great interest among concerned leaders, educators, scientists, economists, and responsible citizens. According to the latest U.S. immigration reports, the Philippines is one of several countries that have been contributing notably large numbers of immigrants to the U.S.A. annually in recent years. This outflow of trained talent, popularly known as the Brain Drain, is causing much concern to both the losing and gaining nations, or, to borrow terms from Swedish sociologist Stevan Dedijer, to the "source" and "sink" countries. The point has been reached, in fact, where emotionalism and ultranationalism tend to color the views many have of this 20th century phenomenon, and to hasten explanations and solutions for the problem without much care for scientific diagnosis.

Very little study has been made to put the Brain Drain phenomenon in its proper perspective, so as to enable decision-makers to adopt a rational and informed approach to the problem. As the President of Education and World Affairs said in 1967:

Few subjects in the field of international education and cultural affairs have been so widely discussed on the basis of so little hard factual data as the so-called

Brain Drain. Much of the discussion has been in highly political and emotional terms. However, the issues posed by the international migration of talent are subtle and delicate and the considerations involved are complex (Marvel 1967).

There are a number of factors propounded and widely believed to be major causes of this phenomenon. Among them and considered as *the* cause of migration of talent and skills is the material "pull" or "attraction" of rich countries. However, the exploratory studies so far available on the Brain Drain point out that there are factors other than the material pull of the rich countries, and these have a more decisive effect on a highly-trained person's decision to leave his home country. To quote from Charles Kidd (1969):

Much migration from less developed countries arises not from poverty itself, just as the pull to the United States is not entirely the opportunity to earn more money . . . The heart of the problem is that both poverty and migration stem from basic problems that are most difficult to deal with and that can be dealt with only by the countries themselves.

The following is a report on a study the writer made of the outflow of high-level persons from the Philippines to the U.S.A.

## *Objectives of the Study*

The study was designed mainly to attain the following objectives:

1. To identify and specify the major factors associated with the emigration of high-level person from the Philippines to the U.S.A.;

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2. To gain insights into the problem of prediction of migration among the highly trained;
3. To throw light on the ways in which education or training at home and abroad may help minimize the outflow of trained talent and skills from the Philippines.

In addition, the study also aimed to explore the motives, goals, and values of persons that migrate, or do not migrate, with a view to understanding the underlying predispositions of these two groups.

Note that there was no attempt to look into the pros and cons of the Brain Drain in this study, which was designed as a diagnostic rather than a proscriptive study.

#### *Conceptual scheme and research hypotheses*

In developing the conceptual framework of this study, the writer made extensive use of the few published exploratory studies on this topic and selected sociological theories on migration.

The review of the literature on this subject as well as on international migration, in general, yielded valuable insights into the causes of the Brain Drain.

Wilson (1964) found that, by and large, British migrants appear to be ambitious, in the sense that they demonstrate "a high level of aspirations, a high need for achievement . . . they are ambitious for experience of all kinds, and at the core of things, they seem most to want an opportunity to use their talents." Wilson also found that the British migrant scientists are a young group — their median age range is 31–35 years. Wilson's subjects were mostly Ph.D. holders and former members of the Royal Society of London; thus it would be interesting to find how his findings compare with a sample of professionals with a wider spread of academic training from another country like the Philippines.

Musgrove's (1963) theoretical and descriptive study of the UK's "migratory elite" stressed

very strongly the notion of *dislodgment* or *alienation* from one's society of origin, this in turn resulting from some type of educational experience. In the same vein, Caplow (1954) and Ladinsky (1967) theorize that migrants are those whose occupational status is least dependent upon their ties in the local community; further, that there are occupations with higher migration rates than others. Chu (1966) found that a foreign student in an American (USA) university is more likely to return to his native land if his study is home-sponsored. He also found that expatriation is positively related to the rejection of one's home cultural values and to the amount of social support from the expatriate-host culture. Chu's theory of social support was somewhat confirmed by the findings of Myers (1967).

Caplow (1954) observed that the tide of migration tended to flow in the direction of economic opportunity. This observation is in accord with Samuel Stouffer's (1962) Law of Intervening Opportunities, which states, in brief, that "the number of persons going a given distance is directly proportional to the number of opportunities at that distance and inversely proportional to the number of intervening opportunities." Although Stouffer's theory has been tested and appears to conform reasonably well with observed facts, Caplow has observed that people differ in their perception of "opportunities," for they differ in their basic attitudes and values.

The desire for professional progress and higher pay in the States was found to be the major reason given by professionals migrating from Latin American countries to the U.S.A. (Riquelme and Gutierrez 1965; Pan American Health Organization 1966). From observation, however, there exists in every less developed country (LDC) a group of equally motivated professionals who perceive greater opportunities for advancement in their country.

Taking into account the above review of the literature, two testable hypotheses were advanced in this study:

1. Migrants and non-migrants differ in

their anchorage in the Philippines: migrants will tend to exhibit weak, or low, anchorage in the Philippines compared to non-migrants;

2. Migrants and non-migrants differ in their valuations of opportunities in the Philippines: migrants will tend to register a more unfavorable or negative valuation of opportunities in the Philippines compared to non-migrants.

#### *Definitions of the major variables*

"Anchorage" is theoretically defined as a person's psychological, social, and other ties, or attachments, to his home country.

"Valuation of opportunities" is defined as the process of matching the societal or situational conditions in the home country with one's professional, social, and economic goals and expectations.

When a person's perceptions of opportunities in his home country match or exceed his valuation of opportunities in the home country, his valuation of opportunities may be said to be positive or favorable (based on Stouffer's [1962] Law of Intervening Opportunities, Caplow's [1954] notion of opportunities, and Dedijer's [1961] and Cohen's [1963] concept of "push-pull" forces).

#### *Methodology and Research Instruments*

The subjects were two groups of U.S.-educated or -trained Filipinos, drawn by stratified sampling from the population of Filipinos who had at least a Bachelor's degree and went to the U.S.A. for degree or specialized training during the years 1960-65. The two groups are those presently living and working in the U.S.A., and those who have returned to the Philippines. The former is referred to here as *migrants*, and the latter as *non-migrants*. The two groups, totaled, are 254 in all (188 non-migrants and 66 migrants). A group of 21 still pursuing studies in the U.S.A. was used as a separate group to validate some of the major findings of this study.

Data to test the two research hypotheses were collected mainly by means of a self-administered paper-and-pencil questionnaire sent to the subjects by mail. A response rate of 71 per cent and 56 per cent was obtained from the non-migrants and migrants, respectively.

To measure attitudinal anchorage, an 11-item attitude scale, called Anchorage Scale (AS), was constructed in such a way that a low score on the Anchorage Scale would mean a weak, or low, anchorage in the Philippines. Likewise, to determine whether a person's evaluation of opportunities in the Philippines were favorable or unfavorable, positive or negative, an attitude scale called Comparative Opportunity Scale (COS) was constructed. A low score on the COS meant a negative evaluation of opportunities in the Philippines. Both attitude scales were constructed in the manner of a Likert Scale and pre-tested twice to check on their validity. The alpha coefficients of the scores of the study subjects on the AS and COS were .70 and .74, respectively, values considered sufficient for research on groups such as those in this study.

#### *Major Findings<sup>1</sup>*

From the sample studied, the results indicate that:

1. Persons weakly anchored, or loosely committed or attached psychologically and socially, to the home country tend to emigrate;
2. Persons who received government support, whether from the home or host-country government, during study abroad are less likely to emigrate;
3. Younger persons, 30 years old or younger, are more prone to emigrate, compared to older persons;
4. Persons who are single at the time they leave the home country are more prone to emigrate than married persons; however, married persons whose families joined them while studying abroad are more likely to emigrate

than those whose families were left in the home country;

5. Persons who obtain a degree or some certificate from abroad, especially in the natural sciences and engineering are more likely to emigrate than those who do not complete an advanced degree or specialized training;
6. Persons with established job ties in the home country during their study abroad are less likely to emigrate;
7. The Filipino female shows a greater tendency to migrate than the Filipino male; this distinction is valid even if other factors are held constant;
8. Persons who perceive little opportunity for themselves in the Philippines are more likely to emigrate;
9. Persons whose evaluations of opportunities in the home country are relatively negative, or unfavorable, are more likely to emigrate;
10. Persons who worked in the Philippine government prior to their study abroad tend to perceive greater opportunity in the Philippines; they are less likely to emigrate.
11. The findings also gave moderate support to the contention that migrants and non-migrants differ in their goals, values, and concerns in life. Migrants tend to show more concern for material goals; non-migrants show more professional interests and non-material concerns. Moreover, non-migrants tend to view conditions in the Philippines more as a challenge than as "push" forces.

In sum, the findings from this study give consistent and strong support to the two major research hypotheses which I set out to test empirically; namely, that the emigration of high-level persons from the Philippines is a function of two complex factors: (1) a person's anchorage in

the Philippines, and (2) his relative evaluation of opportunities in the Philippines as compared to those in the U.S.A.

*The Implications and Use of these Findings  
for an Integrative Approach to the Brain  
Drain*

The findings strongly argue for the adoption of both short-term and long-range programs that can minimize or reduce the loss of trained persons through the Brain Drain. Among the *short-term measures* that may be suggested on the basis of the findings of this study are the following.

1. It has been shown that the propensity to emigrate is higher among persons who are weakly anchored in the Philippines; who perceive little opportunity for themselves here; who are young, single, and female; who have no job to return to; who are in fields such as the natural sciences and engineering; and who have attained or completed a degree or its equivalent from abroad.

However, it was also shown that government support during study abroad substantially attenuates the influence of all these factors and considerably weakens a person's propensity to emigrate.

Considering that government supports tend to weaken a young person's propensity to emigrate; recognizing that investing in the young increases the probability of their return at an age when their prime years are still ahead of them; noting that persons who specialize in the natural sciences and engineering are highly prone to emigrate if they are not government supported, it is suggested that government scholarships for study abroad should give priority to (1) younger

persons enrolled for advanced studies in the natural sciences, engineering, and other highly specialized and high-priority fields, and (2) those who are already employed at the time of their selection.

Females have shown a greater propensity to emigrate, regardless of all the other factors that were found to be highly predictive of migration. Thus, all things being equal, the *male* should be given priority in the selection of awardees for scholarships for study abroad. However, where the female is older, exhibits a higher degree of anchorage, perceives a clear role for herself in the country, and so on, there would seem to be no justification for her not being given priority over the male.

2. Although government support is a potent factor in insuring the return of persons sent abroad for study, it is undoubtedly only a partial solution to the Brain Drain, considering the thousands of others each year who go abroad for study without government support. To attract these persons back to the home country will require a more comprehensive approach. A seemingly easy solution would be to restrict travel and study abroad by means of immigration, passport, and visa requirements. However, such a restriction would violate a basic legal or moral right of individuals to live where they please and to seek those occupations elsewhere that they believe they deserve. The writer strongly identifies with the latter view, and should like to add that restrictive measures might only suppress, but not solve, a problem such as the Brain Drain. It is here argued that emphasis be on more positive measures.
3. Approximately 88 per cent of the subjects of this study indicated that

the prospect of gaining advanced training in their fields of specialization was a very important reason for their decision to study in the U.S.A. This suggests that if the kinds and levels of training that individuals seek in advanced countries could somehow be made available in the Philippines, the outflow of trained talent and skills might be reduced. Very few among our universities/colleges offer graduate programs in the sciences and engineering, yet a preliminary assessment of our requirements for high-level manpower shows a great need for persons with advanced degrees in these fields.

The political and economic feasibility of establishing a Center for Advanced Studies in the Sciences, Engineering, and Related Fields should be immediately explored. The main reason why our universities and colleges have not organized degree programs for advanced studies in science and engineering is the shortage of qualified faculty. But it has been observed that if the few qualified faculty members in various universities could be organized into a manpower pool, so that they could offer courses in their respective fields, to be credited by the other universities through cross-registration; or if a graduate-degree program could be organized on a consortium basis, or through the creation of Professorial Chairs, it would be possible to begin offering graduate programs in critical fields which are not now available in the country, for example, the Ph.D. in mathematics or physics.

Such a project may help to break the isolation of professionals, scientists, and researchers in this country, especially if it includes a program of faculty exchange among the universities and between the proposed Cen-

ter and similar centers in foreign countries. On top of this, such a center would make possible the organization of training or study programs that are geared to the peculiar needs and conditions of the Philippines.

4. Another short-term measure that can be used to attract persons who studied abroad to return, and which has direct relevance to any scholarship program, is the adoption of a systematic procedure whereby persons sent abroad for study or training are properly placed and utilized upon their return. This study has shown that persons who have no jobs or no prospect of a job in the Philippines while on study abroad tend to emigrate. In fact, it has been observed that the more serious problem of many developing countries like the Philippines, is not so much the production of an excess of trained talent, but the inability to create opportunities for their proper absorption.

Among the *long-term measures*, or plans, for reducing the outflow of trained talent from the Philippines are the following.

1. There is considerable evidence from the results of this study that some of the forces that impel persons to emigrate are "push" forces from the home country. Identified by both the migrants and non-migrants as the major sources of frustration among professionals in the Philippines are (1) poor pay and material rewards, (2) poor professional climate, and (3) government inefficiency, red tape, favoritism, and political meddling in appointments and promotions. Any attempt, therefore, to regulate the Brain Drain must take into account these three major sources of frustration. Plans for the improvement of conditions in the world of work in

the Philippines must necessarily be directed towards these areas. One step which the subjects suggested should be taken immediately, and which would not require a single cent to implement, is to reorient the existing recruitment, incentive, and reward systems in the country.

The movement should be toward a *meritocracy*. To do this we must effect such an improvement in our employment practices and incentive system, that trained talent will be *properly utilized, justly recognized, and adequately rewarded*. In fact, this seems to be the most needed reform in our world of work here. Such a reorientation will require a change in our basic values and traditional attitudes, and will necessarily take some time, but we can definitely begin the process of change now.

2. This study has some theoretical and research implications. In seeking the answer to a limited set of questions, it has raised many more. While the study shows that anchorage or a person's attachment to his home country is negatively related to emigration, at what point and how a person become anchored to his home country, or, in the opposite sense, how a person gets dislodged or alienated from his home country, needs further and more careful study. For example, is dislodgement from one's country a process, and is emigration a consequence of this process? If dislodgement is a process, is there a way of interrupting it? How and when? Can education help to interrupt the process? On the other hand, does education sometimes serve, unwittingly, to abet the process of dislodgement? Is education in the Philippines to some extent alienating our young from their own society and

culture, thereby producing migration-prone individuals?

How does a person become attitudinally anchored to his home country? Can this quality of anchorage to home country be taught? Consider this observation by one of the subjects of this study.

One who considers himself a Filipino needs no particular incentive to return to the Philippines . . . he must realize that the Philippines is growing and must learn to appreciate the struggle in the process of growth . . .

I am of the opinion that it is more in the area of Filipino responsibility, understanding of, and faith in the future of, the country, than any form of attraction.

How can we educate Filipinos for national commitment and faith in our ability as a people to achieve national development? There is a strong indication from this study that persons educated in public schools tend to show higher anchorage in the Philippines than persons educated in private schools. Why? The data from this study do not provide enough evidence to shed light on these questions. It may be worthwhile to study this aspect of the Brain Drain further.

The data from this study also show that government-employed persons tend to show a higher anchorage and a more favorable evaluation of opportunities in the Philippines than those employed in private firms. Are these two groups, the government-employed and the privately-employed, different? In what sense? These are questions that need more study.

3. Educationwise, the findings of this study suggest the following measures.
  - a. There is an imperative need for re-orienting our youth's occupational aspirations and expectations to suit the context of the realities

obtaining in our country. The study underscores the importance of guiding our young students' interests into finding their future place in the Philippines as productive and nationally committed citizens. A Guidance Program that can help our young people to make rational choices of occupations in the light of job opportunities is very important at this stage of our country's development.

- b. A close look at the content of education at all levels, as well as at the tools, goals, and objectives of education in the Philippines for the purpose of isolating the components of education that appear to have alienating effects on our young people, is also very much needed at this time.

#### *Limitations of the Study*

The limitations of this study are, first, it was limited to a very special group of high-level persons from the Philippines — those with at least a bachelors degree who studied or underwent special training in the U.S.A. It excludes all professionals or high-level persons who emigrated to the U.S.A. as tourists but later changed their visa status to that of students by enrolling in an American university.

Another limitation is the study's complete reliance on one research instrument, a questionnaire. The original plan to follow up the questionnaire with an interview with the migrants could not be carried out because of a scarcity of time and resources. However, interviews with a sample of non-migrants were conducted.

Nonetheless, a third limitation is that the attitudes of the subjects were studied at only one point in time. We cannot tell with any certainty whether attitudinal factors found to be predictors of migration were present before the deci-

sion to emigrate or appeared as rationalizations after the fact.<sup>2</sup>

### Conclusion

It is clear from the findings of this study that the Brain Drain is a complex phenomenon highly associated with *not one but a combination of factors*, which by mutual interaction tend to bring a person to the decision to emigrate. Any attempt, therefore, to deal with this problem must necessarily take into account these varied forces. Moreover, the findings indicate that this phenomenon will continue to occur so long as the gap, in terms of economic and professional rewards, exists between developed and underdeveloped countries, and so long as countries continue to uphold the basic legal or moral right of individuals to decide where they shall live and seek the occupation to which they believe themselves entitled.

There is therefore *no* solution to the Brain Drain insofar as actually stopping the flow of trained persons is concerned. However, in this paper I have stressed that there are ways of *reducing* the volume of this flow, and it is here argued that the adoption of these measures is a matter that rests largely in the hands of our leaders in the government, in industry, education and other agencies, as well as of our people as a whole.

Hopefully, this study has contributed to a better understanding of why highly trained persons migrate from a developing country like the Philippines; who those persons are who are apt to emigrate; what institutional or social factors contribute to their propensity to emigrate; and which of these situational or institutional factors can be manipulated for the purpose of regulating the outflow of trained persons. In addition, it is hoped that this study has opened up selected areas for further investigation which may in turn lead to a broader perspective and an enlightened view of the Brain Drain phenomenon. I close with a final thought.

... It would be a mistake to state the loss to developing countries in terms of persons or some estimate of

the monetary cost of their education and training. The loss of even a few exceptional individuals in a poor country can mean an important development venture not undertaken, the denial of high quality instruction and training of future leaders . . . and the diminution of the energy, drive and vision without which there is no development (U.S. Congress 1967).

### Notes

<sup>1</sup>Findings 1-10 are statistically significant at least at the .05 level.

<sup>2</sup>The data suggest that these attitudes preceded the decision to emigrate.

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## COMMENT ON THE CORTES PAPER

Bernardino A. Perez

Dr. Cortes' study is a distinct contribution to our better understanding of the Brain Drain phenomenon, differing as it does from those articles and intellectual forays we see published from time to time with little supporting data.

Let me start by noting that difficulties in present-day discussions of this subject often stem from definitional inadequacies and limited perspective. This inadequacy leads to misconceptions about the nature of the problem and, in turn, to the formulation of faulty policy. I submit that a useful, meaningful inquiry into the Brain Drain must be focused on those movements of highly qualified personnel that result in *permanent* residence in the country of destination. Thus, Dr. Cortes' inquiry has asked a fundamental question (at least from the viewpoint of a sociologist and manpower economist), namely: Why do some Filipinos fail to return? The author admits that while the study has established the importance of one's "anchorage in his home country," it has

not determined at what point and how a person gets dislodged from his own country. Sociologists and other students of the phenomenon, as distinguished from demographers and manpower economists, are especially aware of this dual process of assimilation into the host culture and progressive alienation from the culture of origin which affects migrants after extended periods of residence abroad. If dislodgement is a process, the author herself asks a question very relevant for an action-type policy: Is there a way of interrupting it? How and when? What are the critical or precipitating factors?

The significant dimension to observe is not how many are leaving the country for further education, greener pastures, and the like, but rather the extent to which, and reasons why, highly qualified Filipinos fail to return home if and when their country needs them and could employ them. In other words, the migration stream to watch is not so much the gross out-

flow but rather the inflow as well, and the resulting net loss.

An orientation toward the outflow alone can lead to misconceptions, and consequent policy conclusions such as this: since the propensity to emigrate tends to be higher among those who are young, female, and single, with no husband to return to, no job to return to, and so forth, it follows that in order to curtail the outflow, married, government-employed males should be given priority over females for travel and study abroad.

The so-called Brain Drain has thus been viewed with an excessively nationalistic orientation. Some say, for example, that the rich, developed countries should not pick off the talent of the less developed, poorer nations. But our own Filipino nation has imbibed the 20th century spirit of one world and internationalism, with distances shrunk by modern transport and communication technology. More than in other national cultures, the Filipino sympathy is for world progress and international living-together, rather than sheer national life. Indeed, how much different it would be for the world today if the Einsteins and the Fermis of atomic science, and the von Brauns of space technology, had not been allowed to migrate and realize their talents in America. What is viewed as *Brain Drain* could

actually be a *world gain*. For is it not indeed a loss if a highly trained scientist or physician is denied the facilities he needs to follow his chosen calling because he must stay in his country of origin?

The fact is that for certain scientific, professional, and technical callings there is only a world-wide labor market. For such types of talent a national labor market as we commonly understand it, such as for carpenters, lawyers, bookkeepers, and the like, is not consistent with the realities of the modern world of work. Specialized skills move to other places by virtue of economic necessity, and generally, it is considered good policy to remove the obstacles to this kind of mobility.

On the other hand, an orientation focused on the extent to which, and reasons why, talented persons are alienated from their country of birth and discouraged from returning home should lead more logically to the consideration of approaches which utilize such measures as these: (1) keeping talented persons abroad posted of conditions at home; (2) financial incentives for returning residents; (3) responsive educational and employment policies and programs; and (4) establishment of a directorate of Filipinos living abroad who have scientific and specialized qualifications.