

Impacts of Social Justice Perception on Elite Migration

Davood Salmani¹, Gholamreza Taleghani^{2*}, Ali Taatian³

1,2 Faculty of management, University of Tehran, Tehran, Iran

3. M.S., MBA, Sharif University of Technology, Tehran, Iran

(Received: 12 January 2009; Revised: 24 May 2009; Accepted: 25 April 2010)

Abstract

Elite migration
decades while we are seriously in need of educated manpower to help accomplish the 20-year national vision. So to consider brain drain is necessary and must be accounted by policymakers in all levels. In the upcoming
dimensional social justice model as the main cause of brain drain. The results exhibit significant and reverse effects of distributional justice, emotional justice, procedural justice, transactional justice, and informational justice on brain drain intention.

Keywords:

Elite migration, Distributional justice, Emotional justice, Procedural justice, Transactional justice, Informational justice.

* Corresponding

Email: Ghreza@ut.ac.ir

Introduction

The term brain drain first appeared in a report by the Royal Society of London published in 1963. In its original sense, the term referred to the exodus of British scientists to the United States (report to London royal community, 1963). Before the World War II, immigrating of highly skilled immigrants was very rare and often insignificant. Brain drain, as an international problem, originated in the post-war period, when United States became the undisputable leader of western science and a magnet for top level European scientist and technicians (Brana, 2006).

Today the concept is used to express expert's migration to any country; however the final destination is still United States; i.e. an expert may leave his/her country of A to country B which B is more developed, and from B to country C which is even more developed and richer, but finally he/she aims to reach to USA. Thus, brain drain could be considered in a hierarchy.

During the sixties and seventies movements of highly skilled people from developing countries to developed world came to the fore. Therefore the countries with already small population of qualified citizens, started to lose the best ones. On that account the issue was brought up before United Nations. Subsequently, interest in the causes and off-shoots of the brain drain resulted in debates and resolutions (Hansen, 2004: 2). In the seventies, the developing countries took some actions to discourage the outflow and encourage the return of skilled workers. One of the ideas was levying an international tax on skilled workers who left their country of origin. The wealthy countries reacted to this claim immediately emphasizing on the strength of the Article 13 in the Declaration of Human Rights, which stresses the right of the people to live where they choose.

Despite the lack of precise statistical information in this area, this paper is trying to draw more attention to brain drain in Iran. According to the International Monetary Fund report in 2007, the Islamic Republic of Iran has the highest rate of "brain drain" among 61 "developing" and "less developed" countries it measured. More than 150,000 Iranians leave the Islamic Republic every year. The flight of human capital costs the

government over \$38 billion annually, two times the revenues received from selling oil. Under the provisions of a five-year development plan, the country is trying to create jobs for its unemployed population, though the results of these efforts have not yet materialized. Consequently, the country remains unable to benefit from its educated diasporas or its pool of unemployed experts at home. In spite of this situation and Iran's technological and industrial sanction due to political conditions in the past 25 years, Iran continues to maintain high levels of education and research in few major universities, although mostly at undergraduate level. Iranian students continue to win technical tournaments in Robotics, Computer Science, and other fields of engineering and science every year, and Iranians continue to increase the number of their publications in technical journals despite their highly limited facilities and resources.

The whole situation concerning brain drain changed in 1978, when a paper was published by the United Nations Institute for training and research. This study demonstrated that many of those who had left their countries of origin, especially the most brilliant ones, returned home later. Thus, there was an illusion that brain drain was no longer a problem. However, the number of highly skilled migrants continued to rise (Brana, 2006). Events during the 1990s reintroduced the brain drain issue to policymakers and academics. The reason was simple: ongoing increase in skilled immigrations. The series of economical and political changes had great influence on migratory flow of the highly skilled; however the immigration policy in the receiving countries was the chief reason for the increased brain drain. The most industrialized countries, notably the United States, Canada and Australia, France, United Kingdom and others have been competing with each other to attract more highly skilled people. And this competition among the developed countries is still likely to continue in future (Davenport, 2004).

As discussed later, different factors and stimuli could potentially affect the occurrence and/or the rate of the talent flow and could be studied independently or as whole. The sensitivity to justice, especially social justice, could be tracked in most parts of this framework. Surprisingly, no empirical research has yet been done in Iran to examine the possible relationship. Thus, regarding the need for research in this very field, this paper concentrates on social justice as a main factor influencing brain drain.

Literature Review

Brain Drain in Iran

About 200 million people (3% of world population) live out of their origin country. This trend is expected to rise in coming decades. According to Ozden's (2006) comparative study on migration and brain drain which is published by UN, Middle Eastern and African countries are compared on some criteria. Here are some statistics to clarify Iran situation against other Middle Eastern and North African countries:

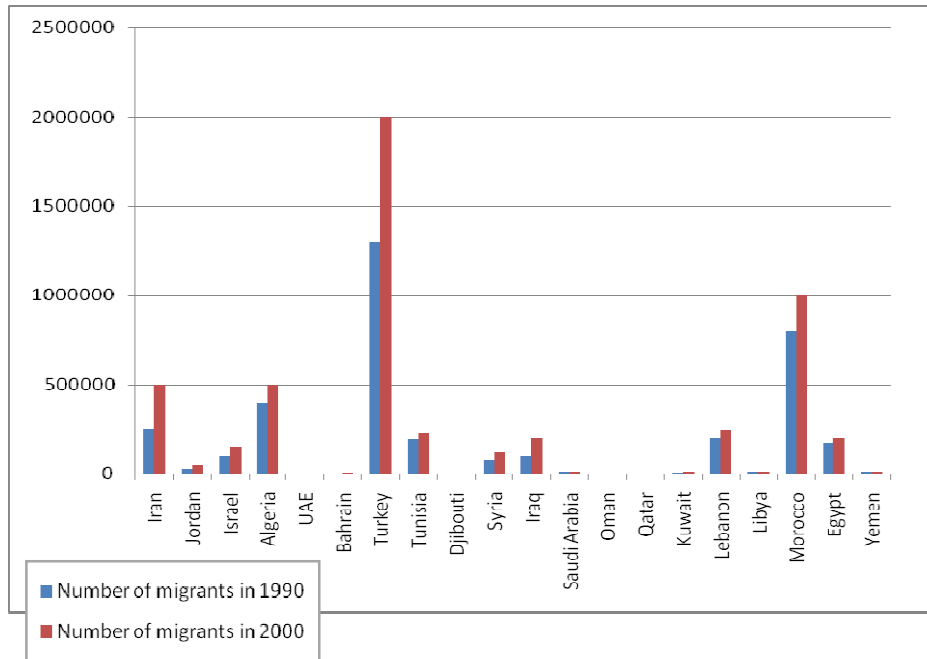


Figure 1: Comparison of Brain Drain in Middle east and North Africa (Ozden,2006)

Figure 1 shows total rate of immigration from Middle East and North Africa to the developed countries in two years 1990 and 2000. According to this graph, after Turkey (about two millions) and Morocco (about one million), Iran and Algeria (about five thousand) have the most immigrants in year 2000. Lebanon, Tunisia, Egypt and Iraq with about 200 to 250 thousands are in next levels.



Figure 2: Comparison of Brain Drain in Middle east and North Africa (Ozden,2006)

Figure 2 compares the percentage of brain drain in two years 1990 and 2000 based on the level of education (high school and college). As we see Iran is among the first countries due to the percentage of immigrants with high school and college education. In all of these countries the rate of university graduated people is high. By comparing the first and second figure it can be stated that Iran is in the second place in terms of the rate of graduated and skilled immigrants among the others in year 2000. According to “Educated and skilled immigrant” (figure 2) in 2000, Turkish educated immigration is approximately %25 of all immigrations, meaning 500000 people (2000000*%25). After that, Iran is in the second place with 21 percent; meaning 425000 people (2000000*%21). This conclusion is the same as International Monetary Funds' (IMF) report. In figure 3, the rate of graduated immigrants is compared as a percentage of all graduated in 1990 and 2000. We can see Lebanon is placed after Iran. Another point that should be considered in this chart is reduction of this rate in 2000 in compare with 1990. The main probable reason could be the increment in the number of educational institutes and training centers such as Azad University in Iran in those years.

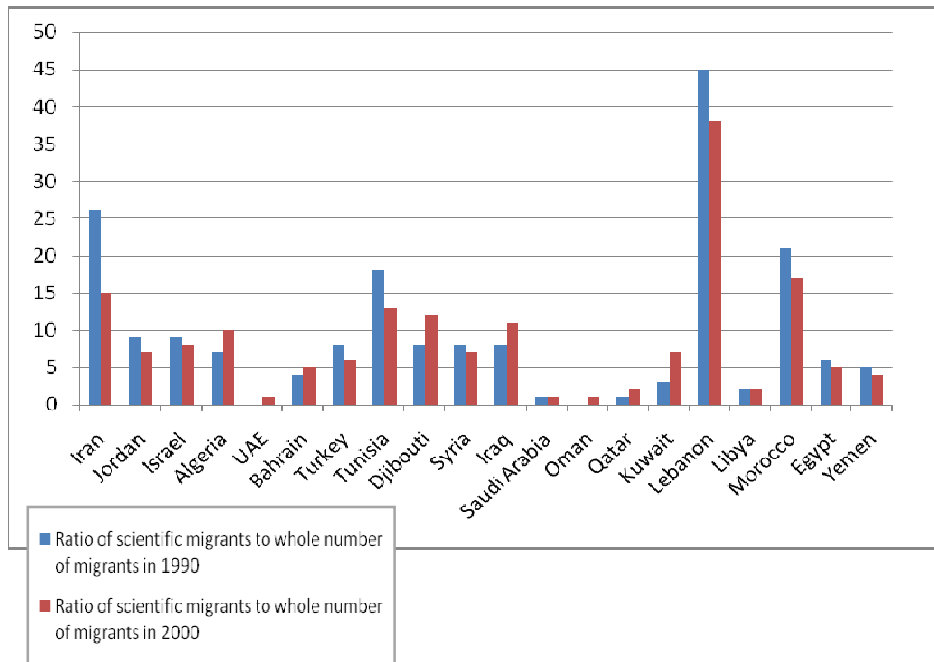


Figure 3: Comparison of Brain Drain in Middle east and North Africa (Ozden,2006)

Justice

For any migration case there will be a mix of motives and perceptions to consider. The motives will include various factors and any combination of them may influence the decision about whether to leave and where to go. In this paper we are interested in workers of high intellectual quality, carrying substantial intellectual capital. In general, the loss of such workers will be a detriment to the economy of a country as long as their marginal social product is positive. Talented people will make a positive (and usually substantial) contribution to economic welfare, either they have much infrastructure to work with or not. Obviously in countries where physical input for research and science from outside is absent or very scarce, the exercise of their own intellectual capability - as the principal resource involved - is likely to be of special value (Kannapan, 1968).

Justice has been the humankind's glorious aspiration during centuries. Justice has always been a concern of human from early times so that

discussing on its nature, as a basic question in political philosophy, still continues (Purezzat. 1380). Justice concept is never achieved completely and has changed through the time. According to Rawls (1971) justice roots in every aspect of human life and it is the first virtue of all social institutes. Greenberg (1990) claims justice as one of the few concepts that build the human interaction foundation. Justice is referred to as the lost key in today world. Perhaps if Maslow was alive, he would put justice as one of the basic steps in the hierarchy of needs. Although he does not mention justice in his pyramid, he does not ignore it and addresses justice with terms like fairness, honesty, and balance as a premise of accomplishing basic needs (Maslow, 1954: 22).

The Five-Factor Model of Social Justice

In social justice literature, four models have been introduced as the constructing skeleton: The first is a one-factor model, in which each constructing item is indicative of one large organizational justice factor (Greenberg, 1990; Lind & Tyler, 1988). The second is a two-factor model, with distributive justice as one factor and procedural justice as the other, expressing procedural justice comprises informational and interpersonal justice. This two-factor model is currently the most commonly used conceptualization in the justice literature. The third is a three-factor model, exploiting distributive, procedural, and interactional justice (subsuming both informational and interpersonal justice). This three-factor model is currently the second-most commonly used conceptualization (Greenberg & Lind, 2000; Byrne & Cropanzano, 2000; Cohn-Charash & Spector, 2001; Gilliland & Chan, 2001). Finally Colquitt found that a four-factor confirmatory model provides the best fit to the data (Colquitt, 2001; Colquitt et al, 2001). According to recent researches, authors suggest another factor called “emotional justice” which could be added to the existing fourfactor model and constructs a new five -factor model. Since all 5 factors are correlated, isomorphic and dependent, the model with the more number of factors is more accurate. Therefore the five-factor model is the most accurate one in explaining social justice and brain drain relationship. In the following, the five factors are discussed individually:

Distributive Justice: Before 1975, the study of justice was primarily concerned with distributive justice. Much of this research was derived from initial work conducted by Adams (1965), who used a social exchange

theory framework to evaluate fairness. According to Adams, what people are concerned about is not the absolute level of their outcomes but whether those outcomes are fair. Adams suggests that one way to determine whether an outcome is fair is to calculate the ratio of one's contributions or "inputs" (e.g., education, intelligence, and experience) to his/her outcome and then compare that ratio with that of others. Although the comparison of the two input-outcome ratios gives Adams's equity theory an "objective" component, this process is completely subjective.

Emotional justice:For many years social science was ignoring an important part of man which is his "emotion". In recent decades emotion concept has found its way in social science discussions. The discussions include expressing and reading emotions. The emotional justice refers to equally expressing and caring about people's emotions and is less regarded in justice literature. Elites have elite emotions. Their emotional intelligence is expected to be higher than of ordinary people.

Procedural justice:With the publication of their book summarizing disputant reactions to legal procedures, Thibaut and Walker (1975) introduced the "study of process" to the justice literature. They viewed third-party disputing resolution procedures, such as mediation and arbitration, having both a process stage and a decision stage. They referred to the amount of influence disputants had in each stage as the evidence of process control and decision control, respectively. Their research suggested that disputants were willing to give up control in the decision stage as long as they retained control in the process stage. Stated differently, disputants viewed the procedure fair if they perceived they had control over the process (i.e., control over the presentation of their arguments and sufficient time to present their case). This process control effect is often referred to as the "fair process effect" or "voice" effect (Lind & Tyler, 1988), and it is one of the most replicated findings in the justice literature. In fact Cohncharash& Spector (Colquitt et al, 2001) virtually equated process control with procedural justice. Thus, it can be probably concluded that more perceived procedural justice leads to less brain drain.

Interactional Justice:Bies and Moag (1986) introduced the most recent advance in justice literature by focusing attention on the importance of the quality of the interpersonal treatment people receive whenever procedures are deployed. They referred to these aspects of justice as "interactional justice." More recently, interactional justice has come to be seen as consisted of two specific types of interpersonal treatment (Greenberg, 1990a, 1993b). The first is interpersonal justice which reflects the degree to which people are treated with politeness, dignity, and respect by authorities or third parties

who are in charge of executing procedures or determining outcomes. The second is informational justice and is described in the following.

Informational justice: It focuses on the explanations provided to people that convey information about why procedures are used in a certain way or why outcomes are distributed in a certain fashion. Even assuming that interactional justice can and should be distinguished from procedural justice, another question is whether the interpersonal and informational facets of the construction merit conceptual separation. Greenberg (1993) suggested that interpersonal and informational justice should be separated because they are logically distinct and have been shown to have independent effects (Colquitt et al, 2001; ChonCharash& Spector, 2001). Interpersonal justice acts primarily to alter reactions to decision outcomes, because sympathy can make people feel better about an unfavorable outcome (decision). Informational justice acts primarily to alter reactions to procedures, in which explanations provide the information required to evaluate structural aspects of the process.

Social Justice, Brain Drain, and Research Hypotheses

In this paper we propose perceived social justice as a reason influencing the migration intention. Sensitivity to justice can be seen in all levels of society. Nevertheless elites are of the most struggling people in society and that makes them more sensitive to injustice. Hence the relation between brain drain and social justice sounds reasonable. The elites who feel more injustice are more likely to migrate to a better country. For instance, difference of income between home and host country is a main factor influencing brain drain (Watanabe, 1969). Or when an individual feels injustice or corruption in his/her organization administration, he/she is more likely to get dissatisfied and migrate. When elites do not perceive justice in their interactions with governors, colleagues or friends, they would migrate to leave the situation. Regarding the increasing importance of information and communication, it is possible that elites intent to migrate to countries with more freedom on information and communication.

Based on these discussions, research hypotheses are developed. It must be regarded that in first hypothesis the influence of general construction of justice (sum of the five factors) is examined and then in the next hypotheses, every single factor is tested.

The main hypothesis is:

- Perceived social justice is negatively related to brain drain intention

- Subsequent hypotheses include:
- Perceived distributive justice is negatively related to brain drain intention
- Perceived emotional justice is negatively related to brain drain intention
- Perceived procedural justice is negatively related to brain drain intention
- Perceived transactional justice is negatively related to brain drain intention
- Perceived informational justice is negatively related to brain drain intention

Methodology

This research is functional from the aspect of target and is descriptive and, specially, field study from the aspect of gathering information; and from the aspect of relationship between variables has casual type. The method of research is survey method whose important advantage is its generalizability.

Research variables are Distributional, Emotional, Procedural, Transactional and Informational justices. These are independent variables and “Intention of Brain Drain” is the dependent variable.

Population and Sample

Students of four universities, University of Tehran, Sharif University of Technology, Tehran University of Medical Sciences and Iran University of Medical Sciences construct the statistical society. This society is selected due to its high rating of brain drain occurred among its members in the past. Sampling is done by Random Sample method. According to Morgan Table the volume of sample is estimated about 560 persons. The respondents were different in education (PhD, Masters, and Bachelor), though for this study their ideas have equal value. 586 persons responded the questionnaires. 33% of them (193 persons) are women and 67% (393 persons) are men. From 585 persons who cited their level of education, 51.3% (304 persons) are Bachelor students, 23.9% (142 persons) are Master Students and 23.4% is PhD students. The average age of respondents is 22.7 years old.

To ensure the validity of items, we used both content and factor validity. Content validity of scales was confirmed by asking from experts and specialists. In this phase after different interviewing and gathering their ideas and doing necessary modifications we were ensured that scales measure the exact contents. Testing the factor validity of scales was done by Confirmatory Factor Analysis and by LISREL 8.53

software. The results of confirmatory factor analysis for both intention to brain drain and social justice are shown in tables 1 and 2.

Table 1: Measurement model of Intention to Brain Drain

		<i>Standard Quotient</i>	<i>t-value</i>
1	Hope to a development trend of Iran	0.74	14.79
2	Few number of student, resolute to migrate (R)	0.37	3.03
3	Stay in Iran just because of family problems	0.58	9.37
4	Most student are resolute to migrate	0.45	9.77
5	Perception of governors to disregarding BD	0.56	9.71
6	Importance of knowledge and scholars	0.49	8.81
7	Security because of staying in Iran	0.84	17.38
8	Perception of growth opportunity in Iran	0.72	14.72
10	Perception of the view of governors from Scientists	0.61	13.47
13	Perception of migration as a mode or real need	0.55	11.30
$\chi^2 = 42.91$ $df = 30$ $RMSE = 0.027$ $GFI = 0.97$ $AGFI = 0.95$ <i>All t-values are significant</i>			

Signifying a measurement model (Confirmatory Factor Analysis) is acceptable under two circumstances: firstly, its fitness indices must be suitable, and secondly t-values must be significant. If the Chi Square is low, the ratio of Chi Square to DF (Degree of Freedom) is lower than 3, RMSEA (Root Mean Square Error of Approximation) is lower than 0.05, and also GFI (Goodness of Fit) and AGFI (Adjusted Goodness of Fit) are bigger than 90%, we can say the model has a very good fitness. Besides, t-values with magnitudes greater than 2 are considered to be significant.

By reviewing the results of LISREL it is obvious that the measurement model of brain drain is suitable: Chi Square and RMSEA are low, the ratio of Chi Square to DF is low, and also GFI and AGFI are more than 90%. All t-values are significant too. Also the results of LISREL indicate that the measurement model of social justice is suitable: Chi Square and RMSEA

are low, the ratio of Chi Square to DF is low, and also GFI and AGFI are more than 90%. All t-values are significant too. The whole results show that the scales of this study have high reliability and validity.

Table 2: Measurement model of Justice

<i>Question</i>		<i>Standard Quotientt-value</i>	
14	Distributional	Fair distribution of resources of Iran	0.56 11.31
15	Distributional	Sense of getting one's own right	0.50 9.35
16	Distributional	To feel just about tasks and responsibilities	0.56 10.54
17	Emotional	To feel fair of other's expression of emotions	0.53 12.16
18	Emotional	Perception of relationship of Iranian governors with other's power	0.35 7.36
19	Emotional	Perception of amount of attention of managers to powerful people	0.68 14.66
20	Procedural	Procedures are the same for all	0.51 9.23
21	Procedural	Executing the rules only for powerless persons (R)	0.38 7.95
22	Procedural	Benefits of powerful persons are latent in society rules	0.48 6.48
23	Transactional	Others' honest behaviors	0.45 9.50
25	Transactional	Not perception of discrimination in daily transactions	0.76 13.41
26	Informational	Providing needed information like others	0.48 4.84
27	Informational	Perception of that some people can provide important information	0.48 7.67
28	Informational	Perception of some people gets the needed information sooner than others.	0.61 8.53
$\chi^2 = 105.67$ DF = 58 RMSE = 0.037 GFI = 0.94 AGFI = 0.91 <i>All t-values are significant</i>			

Analysis of Results

For testing the hypotheses, first we use the Spearman Correlation Test using SPSS. Then the casual relation between independent and dependent variables of study was tested by SEM

We used (Structural Equation Modeling) method in LISREL software. Typically, for ensuring of the relationship between two variables, we first use correlation test. When these two variables are quantitative we must use Pierson Correlation Test and when they are qualitative, we must use

Spearman Correlation Test. In this study the variables are qualitative so we used Spearman Correlation Test. The results of correlation are shown on table 3.

Table 3: Average, standard deviation, and correlation matrix of study variables

<i>Informational Justice</i>	<i>Transactional Justice</i>	<i>Procedural Justice</i>	<i>Emotional Justice</i>	<i>Distributional Justice</i>	<i>Brain Drain</i>	<i>Standard Deviance</i>	<i>Average</i>	
					<i>1</i>	<i>0.47574</i>	<i>3.3179</i>	<i>Brain Drain</i>
				<i>1</i>	<i>-0.457</i>	<i>0.74975</i>	<i>2.1963</i>	<i>Distributional Justice</i>
			<i>1</i>	<i>0.310</i>	<i>-0.395</i>	<i>0.65784</i>	<i>2.0127</i>	<i>Emotional Justice</i>
		<i>1</i>	<i>0.440</i>	<i>0.317</i>	<i>-0.332</i>	<i>0.68512</i>	<i>2.1428</i>	<i>Procedural Justice</i>
	<i>1</i>	<i>0.302</i>	<i>0.369</i>	<i>0.231</i>	<i>-0.259</i>	<i>0.56320</i>	<i>2.4321</i>	<i>Transactional Justice</i>
<i>1</i>	<i>0.156</i>	<i>0.147</i>	<i>0.189</i>	<i>0.142</i>	<i>-0.194</i>	<i>0.45903</i>	<i>1.6621</i>	<i>Informational Justice</i>
<i>All Quotients are significant in 99%</i>								

SEM

For testing the casual relations which are cited in hypotheses we use Structural Equation Modeling. Confirmatory Factor Analysis of the last phase and also fitness indices increase the validity of suggested conceptual model.

All six models were run. In the first model the casual relation of the whole construct of justice (with 5 components) and brain drain was tested. In the other five models the relationship of every single subset of justice (Distributional, Emotional, Procedural, Transactional and Informational justice) with brain drain was investigated. Table 4 illustrates the results of all hypotheses using Structural Equation Modeling method.

Table 4: The results of testing all hypotheses using structural equation modeling method

	<i>Model</i>	<i>R</i>	<i>t-value</i>	<i>result</i>	χ^2	<i>DF</i>	<i>RMSE</i>	<i>GFI</i>	<i>AGFI</i>
1	Brain Drain \leftarrow Justice (Whole)	- 0.77	- 12.32	accept	135.36	80	0.034	0.95	0.93
2	Brain Drain \leftarrow Distributional Justice	- 0.66	- 10.45	accept	81.58	58	0.026	0.96	0.94
3	Brain Drain \leftarrow Emotional Justice	- 0.72	- 10.17	accept	128.64	55	0.048	0.95	0.93
4	Brain Drain \leftarrow Procedural Justice	- 0.68	- 8.67	accept	116.46	57	0.042	0.95	0.93
5	Brain Drain \leftarrow Transactional Justice	- 0.61	- 8.85	accept	61.39	44	0.026	0.97	0.95
6	Brain Drain \leftarrow Informational Justice	- 0.22	- 3.32	accept	67.61	58	0.017	0.97	0.95

All t-values are significant

Firstly all t-values are significant, so all hypotheses are accepted. Secondly validity and fitness of all models are confirmed since in all models Chi Square and RMSEA are low, the ratio of Chi Square to DF is low, and also GFI and AGFI are more than 90%.

Discussion and Conclusion

This study was deliberated to investigate how much social justice and its dimensions can have influence on intention to brain drain in order to relatively overcome the shortage of studies on the issue. In recent years politicians and policymakers have concentrated on social justice, but this assertion is often focused on poor people. Developing the sense of justice in poor levels of society is mandatory; however the results of this study demonstrate that justice in the scientific elites of the society is also critical. In this study, as expected, a negative relationship between social justice and intention to brain drain in Iran is represented. According to the results of table 3, the main hypothesis of study – the relationship between social

justice and intention to brain drain – is confirmed. As we see, correlation quotient is -0.77 and so the determination quotient is 0.60. This means about 60 % of intention to brain drain could be explained by perceived insufficient social justice in Iran. Also this finding shows that there are other factors affecting brain drain intention that must be investigated in future studies. The results of subsequent hypotheses also indicate that perceived emotional justice has the most effect and perceived informational justice has the least effect on the brain drain intention.

66.3 % of respondents expressed that they intend to migrate although not all of them could have the migration condition. Here, regarding the elites' perceived justice, for social justice improvement in the country the factors are discussed:

Distributive justice is so objective and so sensitive in brain drain management. The average perceived distributive justice index takes the score of 2.19 out of 5 and its RSME is about 40%; i.e. elites don't perceive the distribution of financial, physical, and social resources just and this intensifies their migration intention. Governors can relax this trend by providing financial security and other types of facilitations in appropriate areas, like research and development.

Emotional justice also indicates a high sensitivity and needs more attention. Its average is about 2.01 out of 5 and its negative relation to brain drain is 51%; which means the respondents don't perceive the society emotionally fair and their emotions are hurt frequently. Visiting the country again by immigrant elites and helping them feel social justice could function as a mechanism to convince them to return. It should be mentioned that since most of the elites have been stayed away for a long time, they have little information about the current emotional justice in their origin country. Thus making it possible for them and even encouraging them to meet the country can change their perspectives and could dramatically increase their return intention.

Procedural justice needs the comprehensive governor's care. Moreover, parliament and other government authorities should pay attention to the issue. The average perceived procedural justice reaches 2.14 out of 5, and it negatively relates to brain drain by 46%. The elites perceive that rules and procedures are not executed equally for all. Apparently some people are cared more.

Transactional justice gets the point 2.43 out of 5 and is negatively related to brain drain intention by 37%. A part of the respondents do not see their society transitionally just. People are committed to a community till contracted agreements are obeyed and complied justly. Elites do not feel so in their society and thus try to leave their country for a more just one.

Informational justice has a great influence in today's knowledge-based economy. Its average gets 1.66 out of 5 which is the least score among others. This factor has the lowest influence on brain drain intention. Probably informational justice cannot make elites leave the country but it certainly aggravates their intention. An informational justice improvement strategy could decrease the brain drain flow and convince the elites to return. Iranian government and other social institutions should provide realistic and useful information and reports to encourage the elites to return. This should be considered that some people give up returning for its difficult conditions, so policymakers can help them with facilitating the process. However more important it is to avoid available elites' migration. Indeed, – here and now – the available elites are the cash capital while migrants are lost. In the sense of informational justice, which is not likely to act as a single cause of brain drain and acts more as a stimulus, it should be considered that communication plays a vital role. In fact to reach to strong power in civil society and make democracy, ability is required. Ability for achieving democracy and power, in turn, needs knowledge. Knowledge requires awareness, and awareness comes from proper information.

Finally, in order to have right information, communication is necessary. When suitable platform is not available for communication, the life procedure will take place in a context of lacking knowledge and the results will become misleading: awareness to unawareness, knowledge to inability and inability leads to force and tyranny, and subsequently the foundation of environment will be based on fear. Therefore the strategy of improvement of equal access to information needs its specific structure. The Adhocracy structure is the best existing structure in the global world. The role of computer-aided communication also should be considered in this context; suitable speed, mixed with suitable access is vital and of course the effects of communication barriers should be taken into account as well.

References

- Adams, J. S. (1963). Toward an understanding of inequity. *Journal of Abnormal and Social Psychology*, 67, 422-436.
- Adams, J. S. (1965). Inequity in social exchange. In Berkowitz, Leonard (Ed.), *Advances in Experimental Social Psychology*, 2, New York: Academic Press, 267-299.
- Bies, R. J., & Moag, J. F. (1986). Interactional justice: Communication criteria of fairness. *Research on Negotiations in Organizations*, 1, 43-55.
- Blakely, G.L., Andrews, M.C., & Moorman, R.H. (2005). The moderating effects of equity sensitivity on the relationship between organizational justice and organizational citizenship behaviors. *Journal of Business and Psychology*, 20(2), 259-273.
- Boneva, B., Frieze, I., Ferligoj, A., Pauknerova, D., & Orgocka, A. (1998). Achievement, power, and affiliation motives as clues to (e)migration desires: A four-countries comparison. *European Psychologist*, 34(4), 247-254.
- Brana-Shute, R., & Brana-Shute, G. (1982). The magnitude and impact of remittances in the Eastern Caribbean: a research note. In W. F. Stinner, K. de Albuquerque and R.S. Bryce-Laporte (Eds.), *Return Migration and Remittances: Developing a Caribbean Perspective*, Occasional Paper No.3, Washington DC.: Research Institute on Immigration and Ethnic Studies, The Smithsonian Institute, 267-291.
- Branna, S. (2006). *Causes and impact of brain drain in Africa*. Paper presented at Palacky University, Czech Republic.
- Byrne, Z.S., & Cropanzano, R.S. (2000). *To which source do I attribute this fairness? Differential effects of multi-foci justice on organizational work behaviors*. Paper presented at the 15th annual conference of the Society for Industrial and Organizational Psychology, New Orleans, LA.
- Cohen-Charash, Y., & Spector, P.E. (2001). The role of justice in organizations: A meta-analysis. *Organizational Behavior and Human Decision Processes*, 86(2), 278-321.
- Colquitt, J.A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology*, 86(3), 386-400.

- Colquitt, J.A., Conlon, D.E., Wesson, M.J., Porter, O.L.H., & Ng, K.Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology*, 86(3), 425-445.
- Davenport, S. (2004). Panic and panacea: brain drain and science and technology human capital policy. *Research Policy*, 33, 617-630.
- Folger, R. & Cropanzano, K. (1998). *Organizational Justice and human resource management*. Sage publications.
- Gilliland, S.W., & Chan, D. (2001). Justice in organizations: Theory, methods, and applications. In N. Anderson, D. S. Ones, H. K. Sinangil & C. Viswesvaran (Eds.), *Handbook of industrial, work and organizational psychology*, vol. 2, 143-165. London: Sage.
- Greenberg, J. (1993b). The social Side of Fairness: Interpersonal and Informational Moderators of Theft Reactions to Underpayment Inequity. In *Justice in the Workplace: Approaching Fairness in the Human Resource Management*, pp.81-103. Edited by R. Cropanzano, NJ: Hillsdale.
- Greenberg, J., & Lind, E. A. (2000). The pursuit of organizational justice: From conceptualization to implication to application. In C.L. Cooper & E.A. Locke (Eds.), *Industrial and organizational psychology: Linking theory with practice*, 72-108. Malden, MA: Blackwell.
- Greenberg, J. (1990). Organizational justice: yesterday, today, and tomorrow, *Journal of Management*, 16, 399-432.
- Hansen, W. (2004). *The Brain-Drain – Emigration Flows for Qualified Scientists, Part 2: Defining Brain Drain*. Maastricht: UNU-MERIT.
- Harrison, F. (2007). Huge cost of Iranian brain drain. *BBC News*. http://news.bbc.co.uk/2/hi/middle_east/6240287.stm.
- Helou, M. (1995). Contingency Planning for Systems Evolution after Crisis: Reconstructive Brain Drain Policy-Oriented Implications - The Case of Lebanon, 1975–1994. *Journal of Contingencies and Crisis Management*, 3, 149.
- Inkson, K., Carr, S.C., Edwards, M., Thorn, K., Jackson, D., Allfree, N., & Hooks, J. (2004). From brain drain to talent flow: Views of Kiwi expatriates. *University of Auckland Business Review*, 6(2), 29-39.
- IOM.2003 World migration (2003), *Managing migration*. (online publication). Geneva: International Organization for Migration.

- Kannappan, S. (1968). The brain drain and developing countries. *International Labour Review*, 98(1), 1–26.
- Lind, E. A., & Tyler, T. R. (1988). *The social psychology of procedural justice*. New York: Plenum.
- Lowell, B. L., & A. Findlay. (2001). The Migration of Highly Persons from Developing Countries: impact and Policy Responses. *International Migration Papers*, 44. Geneva: International Labour Office.
- Lucas, R. E. B. (2004). *International Migration to the High Income Countries: Some Consequences for Economic Development in the Sending Countries*. Boston University, March 12.
- Maslow, A. (1954). *Motivation and Personality*.
- McLeish, K. (1993). *Key Ideas*. In human thought (Ed.), London: Bloomsbury.
- Nadeem, M., Shafeequr, R., & Salmani, D. (2008). Mathematical conformation of leadership based on Erosmatic. *Academic Leadership*, 6(3), summer.
- Nunn, A. (2005). *Academic and Skilled Migration to the UK and its Impacts on Africa*. Report to the AUT and NATFHE. UK: Leeds.
- Oteiza, E. (1965), Emigration of Engineers from Argentina: A Case of Latin American Brain Drain, *International Labour Review*, xcii(6), December.
- Ozden, C. (2006). Brain Drain in Middle East and North Africa: The Patterns Under The Surface. *Population Division Department of Economic and Social Affairs*, Beirut: United Nations Secretariat .
- Ozden, C., & Schiff, M. (2006). *International migration, remittances and the brain drain*. A co-publication of the World Bank and Palgrave Mackmillan, Washington DC.
- Pour Ezzat, A. A. (2003). *Designing the systems policies, Right based government of Alavi*. unpublished PhD proposal, TarbiatModarres university.
- Pour Ezzat, A. A., & Some'e, P. Z. (2009). The study of personnel and customers' perception of organizational justice, *Iranian Journal of Management Studies*, 2/2(2), 97–113.
- Rawls, J. (1971). *A theory of justice*. Cambridge, MA: Harvard University Press.
- Rego, A., & Cunha, M. (2006). A Five-Dimensional Model of Organizational Justice. *Documentos de Trabalho em Gestão, Universidade de Aveiro, DEGEI*. Portugal: Aveiro.

- Royal Society.(1963). *Emigration of Scientists from the UK*.Report of a committee appointed by Council of the Royal Society, London.
- Salmani, D. (2005).*Quality of work life and improvement of organizational behaviour*.Management Faculty of Tehran University Publication.
- Salmani, D., &Akbari, M. (2006). Fuzzy and research paradigms relationship: a mutual contribution. *Academic Leadership*, 6(2), Spring.
- Salmani, D. &Bagheri, O. (2010).Engineering Leadership.*Academic Leadership*, 8(1), winter.
- Stark, O. (2004). Rethinking the Brain Drain.*World Development*, 32(1), 15–22.
- Thibaut, J., & Walker, L. (1975).*Procedural justice: A psychological analysis*. Hillsdale, NJ: Erlbaum.
- Watanabe, S. (1969).The Brain drain from Developing to Developed Countries, *International Labour Review*, 4, 401-433.