THE EFFECT OF RURAL-TO-URBAN MIGRATION ON THE STATUS OF WOMEN IN TURKEY

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The purpose of this study is to examine rural to urban migration of women aged 15-49, who were interviewed in 1998 Turkey Demographic and Health Survey (TDHS 1998) and to develop a methodology for measuring and comparing convergences and divergences in the status of women according to women's migration status by using a DHS-type quantitative data set. Findings of the study give considerable results in terms of status of women and analysis of migration flows between urban and rural (i.e. urban to urban, rural to urban, urban to rural and rural to rural). Moreover, Factor Analysis technique allows for construction of a Status of Women Index (SWI) by using interviewed women's demographic and socio-economic characteristics. Furthermore, descriptive findings have been tested by linear regression model and similar results have been produced. According to descriptive and multivariate analyses, it is observed that rural to urban migration of women does not only shape new socio-economic conditions of women in their new destinations, but it also a significant factor affecting fertility behavior of these migrant women. As a conclusion, this study asserts that it is possible to measure migration behavior and status of women quantitatively in such demographic and health surveys, which are comparable with similar studies.

INTRODUCTION

The subject of the effects of rural-to-urban migration on the status of women in Turkey is selected because of two main reasons. First, it is believed that there is the necessity for more studies based on anthropological approach in demography on smaller groups, which would have different characteristics than the rest of the population including gender relations and its socio-political and socio-economic effects on demographic processes. Therefore, the status of women seems to be an attractive field for an academic study to be focused in discipline of demography. The literature and the previous researches on the relationship among gender-based issues and demographic processes, which would be presented in the upcoming parts of this study mainly argue that former positivist and orthodox quantitative demographic studies, which concentrated on the major trends in population issues of the whole population tend to ignore (at least undermine) the possible effects of micro-level social and political structures' significance in decision-making and demographic behaviors. The issues related to gender have usually tried to be explained by the level of individual education, the participation of women in labor market or the general level of household income at all. However, it is both hard and misleading to attempt to examine the intra-household and gender-based power relations with such basic socio-economic determinants. In short, one of the basic purposes of this study is to seek for the "details" of the demographic behaviors, which is thought to be structured in the roots of gender relations.

The second reason for the selection of this topic is that Turkey has experienced a significant internal migration flow since the 1950's, which have had unique characteristics in different phases in its historical evolution. Although there are loads of internal migration studies in Turkey beginning from 1960's including Hacettepe University Institute of Population Studies

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surveys of 1968 and 1973, there is an important insufficiency of quantitative data on the whole migration histories of the people and their reasons to move from one place to another. In addition to this, the censuses held by the state provide only information on lifetime migration and ignore the possible multiple steps in the life cycles of people. Despite this insufficiency in quantitative study on migration, there are numerous qualitative researches on the reasons and the integration processes of the internal migrants in their destinations. However, it should be mentioned that those qualitative studies have been conducted on a very limited part of the society (for instance a district of Ankara or İstanbul), and they can not be generalized to the rest of the migrant population in Turkey. Moreover, it is evident that the internal migration studies in Turkey, whether it is a quantitative or qualitative research, are mostly theoretical studies and they tend to test the hypotheses of former migration studies of modernist school, critical approach or other socio-economic perspectives. In this respect, even a gender-based qualitative study on women migrants would turn in the "modernization" or "integration" of individual women in their new environments. In other words, the outcomes of such studies appear to be under the influence of classical sociology that examines the "majority" rather than the "exceptions".

A further reason of the interest of this study on internal migration is that the availability of the TDHS 1998 data about the migration history of the women on the one hand and the information on the attitude, socio-economic characteristics of women and other key factors about women's life including fertility behavior, region they live in and also their husbands' characteristics on the other hand. It is also known that migration is one of the rarely touched issues by the scholars, using the DHS data. However, TDHS 1998 had a more advanced migration module than former ones that would help those, who intend to focus on migration. It covers not only the life-time migration, but it also serves the information about the years lived in destination. The detailed justification of the use of TDHS 1998 and its advantages and disadvantages are given in the methodology section of the study. The international migration of women and its effects on the status of women is purposefully excluded from the study because of the major focus on the internal migration on the one hand and the limitations of the data used in this study.

WOMEN MIGRANTS: EFFECTS OF INTERNAL MIGRATION ON WOMEN AND FAMILY RELATIONS

Landau (2002) argues that the rapid urbanization in developing countries breaks down the traditional family ties, which allows women to be stronger in their social relations. Moreover, she asserts that the migrant women of Africa, who are disadvantageous in terms of housework and childcare burden, education, job experience, gender discrimination and sexual harassment have been able to cooperate to engage in the system in the urban residence and they have united under the umbrella organizations for solidarity free from male interference. As it was previously mentioned, family migration and women's migration and economic status are closely related to each other. LeClere and McLaughlin (1997) argue that, in recent studies, it was seen that migrant women are disadvantageous in destination if they are married. The reason is that, women's wage, female labor force participation rates and work hours spent in day and week decrease in the post-migration phase of the household. Furthermore, authors point out that, older studies found family gains are higher than personal gains after migration. However, individuals do not act independent during migration decision and they affect other household and community members. It is especially evident for the married women, who change their place of residence according to the migration of their husbands. According to the authors, women act in three major ways in destination residence;

a) They exit from labor force after migration,
b) They reduce the hours worked per day and weeks per year, and

c) They may find jobs quickly, but with lower wages as a consequence of changing jobs.

Rowland (1997) argues that the household characteristics, gender roles and marital status is important in examining the migration process of contemporary China. He argues that Chinese migrant households tend to be nucleus families and therefore urbanization has a reducing effect on fertility as well as the anti-natal policies of Chinese government. Author's argument is that women in China migrate more because of lifecycle than economic or individual advancement and author also suggests a further empowerment for women migrants both in marriage and widowhood (Rowland 1997).

In 1961-1981 period, urbanization in India increased and predominant pattern for women migrants is the moves related to marriage. Women's major mobility is from rural to rural areas unlike men's rural-to-urban migration. The family migration occurs as a result of husband's job preferences. According to author's findings, one third of Indian population has moved at least once and 50% of them moved into urban areas, in which 60-75% of those are rural-to-urban migrants for the first time. Despite this, intra-district mobility is the dominant migration type in India (Kumari, 1994).

Samuel (1994) argues that migration is a symptom of social change, and discusses that past studies gave little attention on females. He also points out that the migration experiences of women are different from those of men. Author states that economic facilities gain importance in women's recent migration in India when it is compared with former patterns of female mobility. Samuel (1994) asserts that patriarchal ties loosen after migration and Tamil Nadu women gain more independence and autonomy in their decisions and actions.

When the relationship between the international migration patterns and gender is examined, it is seen the similar characteristics with the internal migration process in terms of gender relations. Oishi (2002) points out that the proportion of female immigrants in the world increased during 1965-1990 period as a result of global trend in labour migration. Although, number of migrant women increased, their vulnerability by the process and discrimination against women also increased. The reason is that, most of them are unskilled labours working as housemaids and underpaid informal sector labourers. She suggests an integrative approach to understand the international migration patterns in developing countries based on three major components. These are:

a) Macro-level: governments' attitudes and actions for or against international migration of women both in emigration and immigration policies,
b) Micro-level: the attitudes, expectations and behaviours of women in migration process including their characteristics like education, age, occupational skills and their autonomy in decision making and control over household resources,
c) Meso-level: the attitudes and values in social and communal level in terms of legitimacy of women's mobility and autonomy (Oishi, 2002).

For Chant (1996), the nature and outcomes of urbanization is "gendered". She argues two important aspects of "gendered" migration can be suggested gender migration influences individual conduct, and urban sector shape the women migration (Chant, 1996).

In their recent study, Boyle, Cooke and Halfacree (2001) adopted a human capital approach in order to examine the female labour force migration. They touch upon the general tendency that sees men as the main source of the household income and women as the joining or

tied migrants during family migration. They also mention the difference of family migration from individual migration decision. The migration decision of the family does not take the skills and employment needs of the female household members into account. Therefore, authors argue that the long-distance family migration is determinal to the employment status of migrated women. In the conclusion of their study, Boyle, Cooke and Halfacree (2001) argue that gender issue is the major factor to explain the women's labour force participation after migration and it is independent from migration process. Moreover, they claim that there is no significant evidence that proves all migrant households are economically better off in their destination residence.

Another study on the migrant women's status was done by Ortiz (1996), which examines the Puerto Rican immigrant women in the USA. She argues that the recent studies on family migration have shown that women are not inactive tied migrants, but they are active agents of migration. On the contrary, Cattopadhyay (1997) argues that marital status of women is important in family migration, which makes women "tied migrants". Author argues that married women migrants are worse in terms of social and economic status when compared to their singe counterparts. Karlekar (1995) points out that the seasonal workers are the poorest ones among all migrant women. She asserts that although social norms sometimes allow women to have a bargaining power, they are generally restrictive and kinship relations create dependency agent relations for women migrants. In contrast to some studies on family migration, she claims that migration gives additional power and confidence to married women in the issues of access and control of resources (Karlekar, 1995). Despite this, she admits that a total break up of traditions for gender roles in the household may result in alienation and insecurity of women in the community they live in.

Pappas–DeLuca (1999) denotes that the predominant gender ideology and gender division of labor, which are based on inequality of men and women, influences women's mobility. According to the author, job opportunities in the urban areas bring women more socio-economic opportunities. She also asserts that education and age is selective for women's rural-to-urban migration in Chile. It is also important that economic modernization of the country positively affected internal migration. In fact, majority of migrants finds jobs in paid domestic labor sector, which is unskilled labor and reflect patriarchal ties.

THE STATUS OF WOMEN

The status of women becomes an inevitable issue in migration studies to be considered. Gender is one of the basic components of the social system, which includes power relations, inequalities and hierarchies among men and women, so it would not be wrong to argue that gender is a socially constructed term rather than a simple biological difference of sexes (Ostergaard, 1992). Therefore, gender system covers the issues of allocation of resources, access to resources and control of resources by men and women, which are shaped by division of labour and responsibilities between genders and autonomy in decision-making of individual men and women (Mason, 1997). Therefore, in comparing the statuses of men and women those problems has to be taken into consideration by adding political and legal rights of women in social system (Mason, 1994).

Basu (1992) argues that gender in social sciences is extremely value laden rather than purely descriptive. Therefore, she suggests to refer the terms "role of women", position of women" or "knowledge, attitudes, and practices of women in the areas of fertility and health". She attempts to measure the status of women (women's position in her words) in three main components. They are; the extend of exposure to the outside world, the extend of interaction with the outside world,

and in particular, the extend, of economic interaction, and the level of autonomy in decision-making within and outside the household. Author argues that gender inequality influences demographic behavior and by the improvement of women's status, demographic disadvantages for women are reduced. She asserts that marriage and kinship patterns and the potential for the female employment are other factors affecting status of women.

The two most influential factors in shaping the status of women are education and labour force participation (Boserup, 1989; Kasnakoğlu and Dayıoğlu, 1997). These factors enable women to have more advantage in accessing and controlling the material resources and provide them autonomy in self-decision-making (Elson, 1991). However, the essential component that determines the wellbeing of the status of women is of course fertility. In fact, the relation between fertility decline in developing countries and the changing social positions of women is an interesting field for many scholars (Ware, 1981). High fertility can be seen as a tool of patriarchy (Malhotra, Vanneman and Kishor, 1995) and fertility decline might be used as an indicator of more egalitarian gender relations in family, in which birth becomes a common decision of spouses rather than a decision of husbands (Caldwell and Caldwell, 1997). Fertility is also an indicator to analyse the autonomy of woman in protecting and using her body (Özbay, 1992).

In an other study of status of women in the USA, Caiazza and Putnam (2002) argue that "social capital" is one of the main determinants for the women's socio-economic, cultural and political well being. They define social capital as "connections among individuals, social networks and the norms of reciprocity and trustworthiness that arise from them". They continue as asserting that strong social networks allows woman to maximize both public and private benefits and advance her career through her ability to exploit her systems of contact.

MIGRATION STUDIES AND WOMEN IN TURKEY

Although there is a wide range of qualitative studies about the effects of migration on the status of women in Turkey (for example, Erman, 1998, Erman, 2000, Güneş-Ayata, 1990, Aile Araştırma Kurumu, 1998), there is an absence of a quantitative literature on the issue. However, it is also related to the overall problem in quantitative research of migration in Turkey (Ünalan, 1998, Özcan, 1998).

There is a lack of quantitative research and analysis of internal migration both in academic and governmental studies in Turkey. The majority of the conducted internal migration studies are based on the census data and there is no specific nation-wide migration survey to examine the high level of internal migration mobility of the population since the beginning of the second half of the twentieth century. Moreover, census data is insufficient to describe and/or explain duration, flows of internal migration in Turkey. Various scholars used different methods to examine internal migration in Turkey and they reached at different findings using the same information gathered by censuses for the same periods. In this section, four of them are presented to show how census data in Turkey is used and diverse conclusions can be produced.

In her study, Ayşe Gedik (1996) used census data for 1965-1985 period to examine the internal migration flows, their magnitude and changes within internal migration trends in Turkey. The scholar uses the permanent residence information five years prior the census date to describe the mobile population between the census days. She informs that the rural-to-urban migration in Turkey can be studied in three different ways; the first one is the assumption of urban areas as the residences that have more than 20.000 population, the second one is the assumption of urban areas as the residences, which have more than 10,000 population and the third one is the acceptance of

urban areas according to administrative division of Turkey regardless to their population size. However, she found out that in all of these three cases, there was a significant amount of urbanization for 1965-1985 period. Despite this, Gedik points out that these findings do not reflect the stepwise and return migration on the one hand and census data does not provide the intra-district and intra sub-district and village migration rates within the same province (Gedik, 1996). In other words, only inter-provincial migration can be studied by using publications of censuses in Turkey. She examined six conflicting issues of her findings with the former internal migration literature for the country. The first issue is the effect of push factors in the rural and pull factors in the urban that have shaped rural to urban migration in Turkey. Gedik (1996) argues that individual skills of education, improvements in transportation and communication services, ability of risk-taking and formerly constructed social ties with the former rural-to-urban migrants are more important than environmental and socio-economic push and pull factors in origin and destination in migration decision.

The second controversial result of Gedik's study is that the volume of the rural-to-urban migration for 1965-1985 period is lower than the urban-to-urban and rural-to-rural migration flows. The third opposite argument is that the return migration from urban to rural increased especially in 1975-1980 period because of the country's socio-economic and political conditions. Fourthly, Gedik asserts that distance between origin (rural) and destination (urban) does not affect the migration decision; social networks are more influential in migration. The fifth controversial result of her study is that the share of the rural-to-urban migrants in population growth of the cities is lower than of the urban-to-urban migrants. (Gedik, 1996). The final result of her analysis is that the high level of population growth in metropolitan areas in Turkey for 1965-1985 period is not an outcome of massive rural-to-urban migration, but it is related to high level of urban-to-urban migration from smaller cities and lower levels of out-migration rates for the given period (Gedik, 1996).

Peker (1996) also uses census data to analyse the internal migration in Turkey. Peker (1996) argues that urban-to-urban migration has become the main trend in internal migration since 1970's. His arguments are similar to Gedik (1996); big cities that have more socio-economic opportunities like İstanbul, İzmir and Ankara had high in-migration rates with lower out-migration rates for 1950-1990 period. On the contrary, less developed Eastern, South-Eastern, Central and Northern Anatolian provinces had high out-migration rates for the same period. Although some of them had moderate or high fertility rates, their population decreased in this period.

Cerit (1982) has a different approach than Gedik (1996) and she found out divergent results for rural-to-urban migration by using census data. Her assumption of urban area is whether the residence that has over 2000 population has municipality or not. She argues that urban population (i.e. the residences having municipalities) increased from 23.5% to 43.9% in overall population in Turkey during the 1935-1980 period. In calculating the rural-to-urban migration, she assumed that the national growth rate as the constant growth rate for both urban and rural areas between two census dates for all censuses from 1935 to 1980. According to her assumptions, the cumulative de-ruralization of rural population between 1935 and 1950 was only 314,607, but in 1950-1980 period it increased to 8,801,966. The only exception for high level of de-ruralization is 1975-1980 period (Cerit, 1982). Her assertions are; a) 15-29 aged males are the most mobile population in the country and women migrate less and b) push factors, because of disadvantageous socio-economic conditions of the rural and military service, are the most significant determinants of migration for Turkey, but push-pull factors are not sufficient to explain internal migration in the case of Turkey (Cerit, 1982). She also denotes that population growth in the rural does not affect migration decision in Turkey when the age structure and fertility rates are considered for the

periods since 1935.

Kocaman and Bayazıt (1993) used the migration data produced by the permanent residence information in the census. Their argument is that the high level of urbanization in Turkey after 1950's is related to modernization of agriculture, high level of population growth, attractiveness of socio-economic and cultural conditions of the rural and policy preferences. For 1965-85 period, more developed Western urban areas have the highest in-migration rates, while East provinces has the highest out-migration rates in terms of inter-provincial mobility. According to their study, they found out that for 1975-85 period, rural-to-urban migration has the highest share in internal migration flows. In addition to this, 20-34 age group is the most mobile population and male migrant population covers 57,4% of total inter-provincial migrant population (Kocaman and Bayazıt, 1993).

As it is observed in the quantitative analyses done by the census results in Turkey, several diverse results are asserted by the researchers. Although the studied periods are very close ones, the reason of different conclusions of each of these studies are related to how they consider the migrant population in the country. assuming the internal migrants is limited to inter-provincial mobile people within the period and describing the migrants among different types of residences (i.e. rural and urban) and the magnitude for populations of types of residences (i.e. whether an urban residence is a municipality, having population more than 20,000 people or having population more than 10,000 people) would produce different number of populations on the one hand and different internal migration flows on the other hand.

METHODOLOGY

Data Used in the Study

The data that would be used in the study is 1998 TDHS that collected the information about the demographic, socio-economic and health characteristics of the respondents. In addition to this, TDHS data allow to conduct region-based analyses in five geographical regions within Turkey, which can be classified further to fourteen sub-regions.

The technique used in sampling is multistage stratified cluster sampling. Three stages of sampling were applied, which were basically; a) stratification of population by settlement size, b) selection of the assigned number of clusters in each selected settlement and c) selection of the secondary sampling units. The target sampling size of the TDHS 1998 was 10,000 household selected by using 1997 General Population Count. In the field, 8059 households, 8576 women, 1971 husbands and 1906 couples were interviewed (TDHS 1998).

The Definitions of Terms for Migration

In this part of the study, it is necessary to define the terms that are related to migration. As given in the section that gives the purpose and hypothesis of the study, the main population focused in this study is the rural-to urban migrant women interviewed in TDHS 1998. Therefore, there has to be a definite origin and destination of these women. The origin for migrant women are defined as the "rural" type of residences, whose population is below 10,000 people during the interview day. Rural is used as a variable label in variables V025 (de facto type of place of residence) and V140 (de jure type of place of residence). The residences having a population below 10,000 are labeled as "countryside" in variables of de jure place of residence (V141), de facto place of residence (V026), childhood place of residence (V103) and previous place of residence (V105) in women's data.

The destination of the focused population in the study is determined as “urban”, which is defined as the residences, which have a population of 10,000 or more people. The term “urban” is directly used in variables V025 (de facto type of place of residence) and V140 (de jure type of place of residence). However, in the other variables for residences, namely, de jure place of residence (V141), de facto place of residence (V026), childhood place of residence (V103) and previous place of residence (V105) big city, city and town are used as a more detailed examination of urban area definition given in V025 and V140.

In some studies of internal migration, distance between the origin and destination is also used as a variable. However, TDHS 1998 data has not such detailed information about the distance between origin and destination. In addition to this, previous region of residence variable is created by using the name of the province of previous place of residence. Despite this, the lack of the cases prevents a complex inter-regional or intra-regional rural-to-urban migration analysis.

The more detailed explanations of the variables and operations done to measure the internal migration status, internal migration flows, migration cohort formulation are given in the following sections of the Methodology section.

Alternative Methods in Analysing the Internal Migration for TDHS 1998: Advantages, Disadvantages and Limitations

In analyzing the migration status and migration flow of the women interviewed in TDHS 1998, used four major measures could be, which have different logics behind them and diverse dimensions in terms of time and space with related to origin, destination and duration of migration.

One of the ways for analyzing internal migration is “life-time” migration method by using the place of birth and current residence variables. This is the main method also used in analyzing migration with census data as presented in literature section. The assumption of this method is that the cases, who live in a different province from the province that they were born in, are the ones that formerly changed their permanent place of residences. Despite the fact that the origin and the destination of migration in such assumption are clearly defined, the limitations of this method makes it unpractical in migration analysis of this study. The reason is that, it only obtains the names of the provinces for origin and destination and does not give any idea about the type of the residence; whether it is a village (rural residence) or a town, city or metropolitan area (urban residences). As a result of the lack of this information, it is impossible to determine the internal migration as rural to urban, urban to urban and like. Moreover, similar to the use of childhood place of residence variable, there is no time information given in this method about when the migration occurred. In addition to this, it is not possible to see the intra-provincial mobility among the urban and rural types of residences, which significantly demarcates the cases observed as migrant population. In sum, life-time migration method is the most inadequate way of analyzing internal migration for TDHS 1998 women’s data, because of not only its insufficiency in time dimension, but also its limitations about urban-rural and intra-provincial migration moves.

The second alternative method is to use the childhood place of residence in analyzing internal migration. Although it seems to be a good variable to define origin and destination when it is considered with the current place of residence, there are several handicaps to shape the migration analysis according to childhood place of residence. First of all, childhood place of residence variable does not provide a spatial origin for migration. In fact, the original question asked to formulate this variable is as follows:

Q102A. For most of the time until you were 12 years old, where did you live?

As seen in the question, childhood place of residence variable gather the information for the place that the interviewed women spent the longest time period until her twelfth age. For instance a women could have lived in countryside until 8 years old, but migrated to a town at her 9th age, and now she lives in another village so she would be coded as she has always lived in countryside, therefore this case would not be analyzed as a migrant women. In reverse, a women lived in countryside until her third age, and moved to a city when she was three years old and still living in the city, she would be considered as she lived her childhood in the city, so she would not be recognized as a migrant. In addition to this, childhood place of residence variable does not include the time of change of residence (i.e. migration), which prevents the researcher to make time-related analyses. In short, childhood place of residence is a variable more related to where the socialization process and cultural formation of the respondent women take place. Furthermore, the most important problem is that there is no definite time for when migration took place, which disables the analyses for time-dimensional calculations like age structure of migrant women, migration age, total fertility rate and like. In other words, it is impossible to construct a variable comparable to conventional migration variables by using this variable.

The third and the most detailed method, which would be applied in internal migration for TDHS 1998 is the use of calendar of both ever married and never married women questionnaire for five years prior to survey day. Although it is the most detailed and extensive information in the questionnaire, which allows one to see all migration and return-migration movements with exact date (month) of migration and duration of migration in destination by gathering all moves and their dates in last five years, it is still limited to be used in this study. The main reason of this limitation is that calendar only provides the migration information for the women, who were mobile within the last five years prior to the interview date. In other words, it only reflects a small part of the ever-migrated women population within TDHS 1998. Although every migration flow can be followed from rural to urban, urban to urban, urban to rural and rural to rural, in practice the women observed in each flow are very small in number and restricts the analyses like synthetic migration cohorts and total fertility rate. As a result, despite its advantages over all alternative methods for measuring internal migration, limitations of calendar about observing migration merely for last five years makes the technique of using calendar an exclusive method for the other women, who experienced migration before more than five years ago prior to TDHS 1998.

In sum, all of three methods presented above have some problems and limitations in terms of defining the origin, destination, date and duration of migration and the extend of the population analyzed. The fourth method, which has been preferred in this study, is the migration analysis by using previous place of residence and de jure place of residence variables. Its details about describing the time and space of the internal migration are presented in the following section.

Internal Migration Analysis by Using Type of Previous Place of Residence and Type of de Jure Place of Residence Variables

In this analysis, variables of type of previous place of residence and type of de jure place of residence are used to calculate the number of internal migrants and to find the population exposed to different migration types. Despite the fact that using type of previous place of residence and de jure place of residence variables for analyzing the internal migration is limited to the last migration movement and it does not give a brief idea about the total number of migration moves experienced by the women included in TDHS 1998, it has several advantages when compared to three methods discussed in previous section. First of all, it is inclusive for all women, whether they

migrated in five years period prior to 1998 or more than 5 years before this period. Moreover, it allows the use of other variables related to migration such as years lived in current place of residence, which informs about the duration of migration and region of previous residence, which allows to observe intra-regional internal migration.

Table 1 presents the distribution of migrants in de jure place of residences according to their type of previous place of residences.

Table 1 Number of Women according to Current Place of Residence and Previous Place of Residences, TDHS 1998

		Type of place of Previous res.				Total
		City (Province Centre)	Town (District Centre)	Countryside (subdistrict or village)	Abroad	
Type of Place of Residence	City (Province Centre)	862	664	1244	90	2,860
	Town (District Centre)	168	150	403	14	735
	Countryside (subdistrict or village)	164	166	675	16	1,021
Total		1,194	980	2322	120	4,616

According to this table, the percent distribution of migrant population in migration types by direction of migration flow is as given below.

According to Table 1, the number of internal migrants is found as 4502, which is by subtracting female immigrant population from total female migrant population according to TDHS 1998 women's data.

However, in order to find the consistent number of mobile female population within the data set given above, the years lived in actual place of residence variable is used, which has two utilities for the migration analysis in this study. This variable has 4614 migration observations when its values are distributed according to type of de jure place of residence variable including the 120 cases migrated from abroad and 4502 internal migration cases when its values are distributed according to the type of previous place of residence variable after excluding the ones that have emigrated from abroad by using TDHS 1998 data set. In order to overcome the problem of missing cases with related to the type of previous place of residence and type of de jure place of residence variables and their distribution in each other, an additional two-step operation is done. The reason is that, the years-lived in actual place of residence variable directly includes the information of the time passed after the last move from the previous place of residence. Therefore, years lived in current place of residence variable should be used with type of previous place of residence at the same time. First, it is created a new variable by using years-lived in actual place of residence variable. Women, who responded that they lived 0 to 45 years in their actual place of residences, are accepted to be migrants. On the other hand, women, who replied the question as they have lived in their residence since they were born, are taken as immobile population. Visitors, inconsistent answers and missing values are assumed to be system-missing observations. Then, the migration flow variable is created, in which type of previous place of residence, type of de jure place of residence and years lived in actual place of residence variable are used at the same time. In the end, the distribution of all women by each migration type (according to direction of migration flows) is given in Table 2.

Table 2 Percent Distribution of Population according to Internal Migration Flows by Years Lived in Actual Place of Residence, Type of De Jure Place of Residence and Type of Previous Place of Residence, TDHS 1998

	Percent
rural to urban	20,6
urban to urban	23,1
rural to rural	8,4
urban to rural	4,1
urban immobile	24,0
rural immobile	19,7
Total	100.0
Number	7979

As a result, there are only 5 missing migrant observations when the number of internal migrants is calculated by using only type of previous place of residence and type of de jure place of residence variables. Therefore, by using the years lived in actual place of residence variable in addition to the residence variables, all inconsistent and missing values that emerges in the cross-tabulation of type of de jure place of residence and type of previous place of residence variables were excluded and a refined migration variable is reached.

The further contribution of appropriation of years-lived in actual place of residence variable in migration analysis of TDHS 1998 women's data is the ability of analyzing time-dimension related effects of migration in destination in post-migration period of migrants. One of the main aims of the study is to show the changes in demographic, socio-economic and cultural characteristics of migrant women according to the time that they have lived in their destinations. In this respect, the given single year values in variable of years-lived in actual place of residence is re-grouped in 5-year migration cohorts to get conventional time-period intervals to compare the changes in migrant women's characteristics pointed out above.

In conclusion, it is believed that the most appropriate technique for determining the migrant population and their distribution of migration flows is the composite use of variables "type of de jure place of residence" (destination), "type of previous place of residence" (destination) and "years lived in actual place of residence" (duration of migrant status) variables. As a result, there were 4496 internal migrant cases in TDHS 1998 women's data.

Multivariate Analyses

It is insufficient to explain migration and gender-related issues by using only single variables, which would only provide frequency distribution of women in female population according to that variable or its cross-tabulation with other individual descriptive variables. The reason is that such descriptive analyses are based on a uni-dimensional assumption that a variable obtains no other relational and/or inter-relational pattern with any other variables, which is potentially related to objective of the study. Therefore, it is necessary to apply other multivariate analysis methods within a research, which aims to find meaningful and statistically significant links between the dependent variable(s) and independent variable(s). In this respect, it should be chosen an advanced statistical method and it is also required a model building by using the outputs of the

advanced method used in order to investigate the arguments of the study.

For the reasons pointed out above, "Factor Analysis" is chosen as the method to examine the multi-dimensional relationships among the variables in this study, which have been analyzed on descriptive level. This section has two main parts; in the first part, a brief theoretical background of the factor analysis and its fields of study is presented. In the second part, the variables used in factor analysis for this study and model building by using the results of factor analysis are discussed. In the conclusion part of this section, the outputs are presented, which are produced as a result of using the model based on factor analysis for explaining the status of women in Turkey. It should be mentioned that, the multivariate results are scrutinized on the basis of women's migration status according to rural-to-urban migration flow, which is the other main component of this study. In sum, it is expected to find out paths to reveal potential causal relationships between rural-to-urban migration and status of women in Turkey by using statistical information of TDHS 1998 and it is also intended to help to make other further analysis among demographic and socio-economic characteristics of women and their status within the society.

Factor Analysis

Factor analysis is basically "…used to uncover the latent structure (dimensions) of a set of variables." (Garson, 2003). Moreover, factor analysis can be defined as follows:

"Factor analysis is a generic term that we use to describe a number of methods designed to analyze interrelationship within a set of variables or objects [resulting in] the construction of a few hypothetical variables (or objects), called factors, that are supposed to contain the essential information in a larger set of observed variables or objects… that reduces the overall complexity of the data by taking advantage of inherit interdependencies [and so] a small number of factors will usually account for approximately the same amount of information as do the much larger set of original observations." (Stapleton, 1997; cited from Reyment and Joreskog, 1993). In the light of the definitions of factor analysis given above, Garson (2003) lists six main purpose of factor analysis, which are:

a) To reduce a large number of variables to smaller number of factors,

b) To select a subset of variables from a large set, based on which original variables have the highest correlations with the principal component factors,

c) To validate a scale or index by demonstrating that it is consistent item loaded on the same factor, and to drop purposed scale items, which cross load on more than one factor,

d) To establish that multiple tests measure the same factor, thereby giving justification for administering fewer tests,

e) To identify clusters of cases and/or outliers, and

f) To determine network groups by determining which sets of people cluster together using Q-mode factor analysis.

In this study, Principle Components Analysis (PCA) is preferred for model building. The reason is that, there is no established theory or model that can be used to measure status of women by using DHS data, which prevent the study to test such model with Confirmatory Factor Analysis. A further reason of this preference is that the superiority of Principle Component Analysis method on Principle Factor Analysis Method by attempting to reach at set of factors, which can account for all the common and unique variance in a set of variables (Garson, 2003). In addition to this, R-mode factor analysis, in which rows are cases and columns are variables and cell entries are scores of cases on the variables is the used factor analytic data mode. In R-mode, the factors are clusters of variables on a set of people or other entities, at a given point of time (Garson, 2003), which is

suitable for a cross-sectional survey data like TDHS-1998 women's data. In other words, Explanatory Factor Analysis is used for theory generating unlike theory testing of Confirmatory Factor Analysis (Stapleton, 1997). In this study, SPSS 8.0 version is used to compute the Factor Analysis scores.

Factor Analysis Application and Model Building

After giving the brief theoretical background and assumptions about Explanatory Factor Analysis and Principle Components Analysis, second part of this section intends to imply the Principle Components Analysis method in order to produce factors that are assumed to be explanatory for the status of women in Turkey. Before the details of PCA application are given, it should be pointed out that continuous, scale and dichotomous variables could be used in factor analysis. Therefore, some modifications were done for the TDHS-1998 women's data variables. Moreover, PCA excludes any case with missing value for any of the variables put in the analysis, which obliges the study to make some additional assumptions to maximize the number of observations. By having these limitations, some additional re-coding and computing operations were done within the data set used by using SPSS 8.0.

In the PCA thirteen variables from TDHS 1998 women's data set, which are about women's basic demographic and socio-economic characteristics and respondents' attitudes for decision-making process within the household were used. They are:

- age of the respondent (V012),
- educational attainment of the respondent in single years (V133),
- having a direct social security service (SOCSEC),
- respondent's employment status (V714),
- total children ever born of the respondent (V201),
- monthly income of the household (INCOME)
- and attitude variables on right for beating of the husband for neglecting childcare (BEAT2), right for beating of the husband for arguing with husband (BEAT3), right for beating of the husband for spending needlessly (BEAT5), right for beating of the husband for refusing intercourse (BEAT6), and
- other attitude variables on important decisions should be done by men (BETTER1), men are wiser (BETTER2) and women should not argue with men (BETTER3).

Variables for age, education and total children ever born are continuous variables, while income of the household is a scale and social security, working status and attitude variables are dichotomous.

The "monthly income of the household" variable is a constructed scale by using a set of dichotomous variables. The original variables of TDHS 1998 women's data are: "total income of the household is more than 100 million TL" (S126A), "total income of the household is more than 300 million TL" (S126B), total income of the household is more than 500 million TL" (S126C) and "total income of the household is less than 50 million TL" (S126D). Although the numeric intervals of total income of the household variables are not conventional, those variables are suitable to create a 5-level scale from the lowest to highest level of income. In PCA, therefore, a 5-level scale for monthly income of the household is used.

The original "social security" variable (S712A) of TDHS-1998 women's data is a categorical variable, which contains the types of social security (SSK, Bağ-Kur, etc.). However, this question is only asked to currently working women in order to learn whether they benefit from a social security facility directly. Therefore, it is re-coded to create a dichotomous variable, in

which women, who benefit from a direct social security facility, they are given value “1” and those women, who answered “No” and “Don’t Know” and for those women, who are currently not working are given the value “0”.

Attitude variables are all dichotomous variables in nature in the original TDHS-1998 women’s data. Despite this, there are “Don’t Know” answers in attitude questions, which transform attitude variables from dichotomous to categorical variables. In order to get rid of this problem, it is assumed that the women, who replied those questions as “Don’t Know” are closed to value “0” and they are considered as they replied as “Yes” to attitude questions, which recognize men’s superiority both within household and in the society. This assumption also helps the study to minimize the missing value for those variables. Therefore, for attitude variables “No” answers are given value “1” and “Yes” and “Don’t Know” answers were given value “0”. It should be noted that three attitude variables are not included in the PCA, which are thought to be insignificant in decision making process and access and control of resources by women. They are “husband has the right for beating because of burning food” (S766A), husband has the “right of beating because of talking to other men” (S766D) and “male children have better for education” (S767D)

For “women’s employment status” variable (V714) the original data values are used, which are; respondent currently working (as value “1”) and respondent currently not working (as value “0”).

In PCA operation, all 8576 women’s information for the variables presented above are used, which is the total number of the cases in TDHS-1998 women’s data set. The reason is that, the purpose of the study is to expose all those women in a status of women analysis in order to make comparisons among different groups of women like age, migration status and like and to attempt to observe divergences and convergences of those women with regard to the status group (category) that they stand in. As pointed out in the previous part of this section, it is used Principle Components Analysis (PCA) with a R-mode, where rows are cases and columns are variables and it was not chosen a rotation method in the model.

It should also be mentioned that the data is weighted by weight variable (V005) in accordance with the sampling design and to have more sensitive factor scores among regional differences of the sample population.

Principle Components Analysis Results

The table below displays the communality of the variables used in PCA.

Table 3. Communality of Variables within PCA, TDHS 1998

	Initial	Extraction
V012	1,000	,841
V133	1,000	,648
SOCSEC	1,000	,722
V714	1,000	,702
V201	1,000	,836
INCOME	1,000	,408
BEAT2	1,000	,609
BEAT3	1,000	,600
BEAT5	1,000	,647
BEAT6	1,000	,547
BETTER1	1,000	,585
BETTER2	1,000	,560
BETTER3	1,000	,532

Table shows the squared multiple correlation of variables with factors. Age and total children ever born are the variables that have the strongest correlation relationships within the common factors, where monthly income of the household has the lowest correlation. The following table below gives the total variance explained by the factors produced by the PCA.

Table 4. Total Variance Explained by the PCA, TDHS 1998

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	**Total**	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**
1	4,095	31,499	31,499	4,095	31,499	31,499
2	1,716	13,196	44,696	1,716	13,196	44,696
3	1,422	10,940	55,635	1,422	10,940	55,635
4	1,005	7,729	63,364	1,005	7,729	63,364
5	,866	6,661	70,024			
6	,616	4,738	74,762			
7	,575	4,424	79,186			
8	,548	4,217	83,404			
9	,499	3,839	87,243			
10	,489	3,762	91,004			
11	,458	3,521	94,525			
12	,425	3,270	97,795			
13	,287	2,205	100,000			

The PCA have produced thirteen factors by using those thirteen variables, which are assumed to be explanatory in examining the status of women. However, only first four factors have eigenvalues bigger than 1. The first factor has the largest eigenvalue (4.095), which has the largest amount of variance explained that is equal to 31.5% of the cumulative variance. The cumulative percent of the variance explained by the first four factors is 63.364%. Table 4 serves the factor loadings of variables used in the PCA.

Table 5. Factor Loadings of the PCA, TDHS-1998

	Component			
	1	**2**	**3**	**4**
V012	-,219	,739	,477	-,141
V133	,684	-,370	,166	-,129
SOCSEC	,379	-,275	,702	9,621E-02
V714	-8,653E-03	-,322	,700	,329
V201	-,428	,748	,294	-8,131E-02
INCOME	,481	1,358E-02	,245	-,342
BEAT2	,605	,294	-6,512E-02	,391
BEAT3	,704	,235	-6,286E-02	,213
BEAT5	,654	,275	-,112	,362
BEAT6	,631	,236	-,119	,281
BETTER1	,692	,108	-4,170E-03	-,307
BETTER2	,682	5,366E-02	-5,623E-02	-,299
BETTER3	,624	7,347E-02	1,844E-02	-,369

The factor loadings in the table above are the coefficients of the variables while computing the factor scores in the PCA. It is seen that the factor loadings of each variable in each four factor are not similar, which affects the total variance explained by each of those four separate factors.

Modelling PCA Results

Principle Components Analysis has produced thirteen factors, where the first four of them have the eigenvalues bigger than 1 and therefore, they are statistically significant amounts of explained variance for the data set used in the analysis. However, it is necessary to make a further modelling to operationalize the factor scores for other analysis in this study.

Therefore, it is attempted to create an index for status of women by using the factor scores provided by the PCA in the previous part of this section. In fact, this modeling is based on the studies of Deon Filmer and Lant Pritchett (1998) for creating an indirect household wealth index by using DHS data. Filmer and Prithcett (1998) applied PCA by using durable goods and housing conditions variables of DHS data. However, they chose only the first factor's scores in their study and produced an "Asset Index" by dividing the sampling populations into five equal quintiles according to the factor score of households had in the end of the factor analysis. Then they re-groped the quintiles and created three wealth categories from the lowest to highest factor scores, which refers to 40% (lowest) 40% (middle) and 20% (highest) of the households. Then authors used this index in analyzing the differences between the school enrolment rates of children among those household wealth categories. The index is also used by Sahn and Siegel (2000) in analyzing the child nutrition and household wealth relationship. There are other studies that used PCA and Asset Index in Turkey like Hancıoğlu (2002) and Özdemir, Alyanak, Koç and Hancıoğlu (2003), while analyzing the early age mortality and other demographic indicators from TDHS 1998 data.

However, the approach of creating an index for status of women in this study using the PCA scores of women in this study is different from Filmer and Prithcett's logic of Asset Index. Unlike Filmer and Prtichett's assumption of dividing the sampling population into five equal quintiles (20% for each), PCA scores are divided into five intervals, which have equal distance from one another. Despite this, the first factor of the PCA is preferred as in Asset Index. The reason is that, each separate factor are assumed to be unique in the level of variance explained and they are not additive. Therefore, the first factor, whose eigenvalue and total variance explained is the highest

(31.5%) is the most appropriate factor for modelling. This operation is valid for factor scores, because factors produced at the end of the PCA are continuos variables. The table below shows the percent distribution of five factor- score intervals within five equal quintiles constructed by PCA.

Table 6. Percent Distribution of 5 intervals within 5 Quintiles of 1st Factor's Scores TDHS 1998

		Quintiles lowest 20%	Second 20%	third 20%	fourth 20%	highest 20%	Total	Number
Intervals	1	100,0	-	-	-	-	100,0	517
	2	64,3	35,7	-	-	-	100,0	1505
	3	-	55,1	44,9	-	-	100,0	2139
	4	-	-	24,5	55,6	19,9	100,0	3084
	5	-	-	-	-	100,0	100,0	1102
	Total Number							**8347**

As can be seen in the Table 6, 20% quintiles are not homogenous in terms of the factor scores that the women get in TDHS-1998 women's data. Furthermore, scaling the factor scores by equal intervals allows having a conventionally equal, mathematically comparable and more homogenous and unique index values for women. In sum, in this study factor scores of the first factor is transformed a five-unit index from the lowest to highest scores of women, whose intervals among units are mathematically equal conventional distances.

The table below presents the mean, median, maximum, minimum values and range of first factor score.

Table 7. Frequency Descriptive of 1st Factor, TDHS 1998

N	Valid	8348
	Missing	228
Mean		-7,3907983E-14
Median		,1581510
Std. Deviation		1,0000000
Variance		1,0000000
Range		4,66923
Minimum		-2,64752
Maximum		2,02170

As can be followed by the table, range of first factor's scores is 4.66923. Therefore, the distance between index units is equal to;

4.66923/5 = 0,933846

The normal distribution of factor scores of the first factor is a bell-shaped curve and the median women has a factor score of 0,1581510, which is very close to mean that is equal to 0. As can be followed from the histogram, there is no significant outlier that would distort the homogeneity of the index intervals. There are 8348 cases, because, the PCA excludes any case that has a missing value in any variable input in the factor analysis. Therefore, 228 out of 8576 women are not included in the index.

After having the minimum, maximum values and the range of the factor scores of the first factor, the index is created. The percent distribution of the index scores among women is as in the table below.

Table 8 Percent Distribution of Status of Women Index Scores, TDHS 1998

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	517	6,0	6,2	6,2
	2,00	1505	17,5	18,0	24,2
	3,00	2139	24,9	25,6	49,8
	4,00	3084	36,0	36,9	86,8
	5,00	1102	12,9	13,2	100,0
	Total	8347	97,3	100,0	
Missing		229	2,7		
Total		**8576**	**100,0**		

The percent distribution of all women within index shows that the majority of the women have middle or upper-middle index scores, and the biggest share of the female population settles in the fourth level of the index. However, this distribution is not the same for different groups.

Testing the Model: Linear Regression Analysis

In the previous sections, it has been presented the methodology of quantitative measurement of the status of women, modelling a descriptive indicator (ie. Status of Women Index) and the cross-tabulations of this indicator with some background characteristics of the women focused on in the study. However, it will be more useful to examine the variable that is argued to measure status of women with other variables by using a further multi-variate technique.

In this respect, linear regression is used to analyze the causal relationships and statistical significance of these relations. As presented in the sixth section, Principal Components Analysis method of Factor Analysis produced numeric factor scores for all women, which is a continuous variable that has been used to construct the SWI by grouping these factor scores. Therefore, in linear regression, raw factor scores of women are used as dependent variable. The reason is that, SWI is a variable that was constructed for practical descriptive purposes and it is hard to use SWI as dependent variable in linear; because it is an abridged indicator, it does not reflect actual continuous values for the cases.

Two models have been applied to test the independent variables on the status of women. In the first model all observed women, regardless of they are internally migrant or immobile are included in the regression. In the second model, only the migrant women are analyzed. The reason of applying two separate linear regression models is that, some of the independent variables are only available for internal migrant women such as years lived in current place of residence and origin region are excluded for immobile women in a single regression equation.

In addition to this, four reference groups are used in these models for originally categorical variables. The common characteristics of these reference groups are that they all have the highest SWI scores in descriptive analyses. In short, the β coefficients of other categorical variables show the direction of change in dependent variable according to these reference groups. They are, West for de jure region of residence, West for previous region of residence, urban-to-urban migrants for migration flows and never married women for current marital status of women. The independent variables used in the linear regression analyses are as follows:

a) De jure regions of residence: South (BOLG2), Central (BOLG 3), North (BOLG4), East (BOLG5).

b) Migration Status and Migration Flows: Rural-to-urban (RU), Rural-to-rural (RR), Urban-to-Rural (UR), Urban immobile (URIMM), Rural immobile (RUIMM).

c) Current Marital Status: Currently Married (CUMARR), Formerly Married (FMARR).

d) Region of Previous Residence: South (ORREG2), Central (ORREG3), North (ORREG 4), East (ORREG 5).

e) Duration of Migration: Years lived in current place of residence (MIYEART).

The variables in a, b, c and d are dichotomous variables having value 0 and 1, and the years lived in current place of residence variable is a continuous variable having values between 0 and 45.

First model shows the linear regression results for all women, the first table represents the model fit and the second one shows the β coefficients and other tests for collinearity and significance. As can be followed in Table 9, adjusted R2 of the model for all women is 0.301, which means that this model represents the 30.1 percent of the variance explained for the studied population.

Table 9 Linear Regression Model Fit for All Women, TDHS 1998

	R	R^2	Adjusted R^2	Std. Error of the Estimate	Change Statistics				
Model					R^2 Change	F Change	df1	df2	Sig. F Change
1	0,549	0,302	0,301	0,840	0,302	306,246	11	7795	0,000

Table 10 Linear Regression Results for All Women, TDHS 1998

Model		Unstandardized Coefficients β	Unstandardized Coefficients Std. Error	Standardized Coefficients β	t	Sig.	Collinearity Statistics Tolerance	Collinearity Statistics VIF
1	(Constant)	1,094	0,028		38,459	0,000		
Migration Status and Flows								
	RU	-0,667	0,029	-0,268	-22,907	0,000	0,657	1,523
	RR	-0,925	0,039	-0,258	-23,811	0,000	0,764	1,309
	UR	-0,500	0,051	-0,100	-9,817	0,000	0,870	1,150
	URIMM	-0,132	0,029	-0,056	-4,638	0,000	0,608	1,644
	RUIMM	-1,036	0,031	-0,412	-33,755	0,000	0,602	1,661
De Jure Regions of Residence								
	BOLG2	-0,435	0,029	-0,156	-14,823	0,000	0,811	1,234
	BOLG3	-0,336	0,026	-0,141	-13,122	0,000	0,771	1,297
	BOLG4	-0,213	0,038	-0,057	-5,571	0,000	0,853	1,173
	BOLG5	-0,617	0,029	-0,231	-21,394	0,000	0,769	1,301
Marital Status								
	CUMARR	-0,519	0,023	-0,239	-22,851	0,000	0,818	1,222
	FMARR	-0,562	0,057	-0,098	-9,924	0,000	0,911	1,098

As can be seen in Table 10, all the variables in the model are significant in 0.01 confidence level and collinearity among these variables is low. The reason is that, variables with VIF scores close to 10,0 are considered as having more troublesome with collinearity (Kleinbaum, at all, 1998). Standardized β coefficients represent the change in dependent variable for each one unit of the related independent variable. According to the table above, being a rural-to-urban migrant has a lowering effect on status of women and lowers the factor score (dependent variable) –0,268 when compared to urban to urban migrants. There is a similar relation between urban-to-urban and rural-

to-rural migrants, but women get very close factor scores if they are urban-to-rural migrants or urban immobile ones and all other current region of residence and marital status variables remain constant. Regression shows that the least advantageous groups are rural immobile women (-0,412) and women living in the East (0,231) and who are currently married women (-0,239). This finding is contrary to descriptive results reached by using SWI scores.

In the second model, only internally migrated women are included in the linear regression model and origin region and years lived in current place of residence variables are also used for these women. As presented in Table 11, adjusted R2 of the second model is 0.289, which means that this model explains 28,9 percent of the variance and model is statistically significant.

Table 11 Linear Regression Model Fit for Internal Migrant Women, TDHS 1998

Model	R	R^2	Adjusted R^2	Std. Error of the Estimate	Change Statistics				
					R^2 Change	F Change	df1	df2	Sig. F Change
1	0,539	0,291	0,289	0,837	0,291	127,350	14	4343	0,000

Table 12 Linear Regression Results for Internal Migrant Women, TDHS 1998

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		β	Std. Error	β			Tolerance	VIF
1	(Constant)	1,207	0,042		28,883	0,000		
Migration Flows								
	RU	-0,645	0,030	-0,313	-21,750	0,000	0,788	1,268
	RR	-0,929	0,039	-0,338	-23,571	0,000	0,794	1,259
	UR	-0,529	0,051	-0,140	-10,322	0,000	0,884	1,131
De Jure Regions of Residence								
	BOLG2	-0,367	0,051	-0,127	-7,264	0,000	0,536	1,867
	BOLG3	-0,301	0,040	-0,128	-7,472	0,000	0,556	1,798
	BOLG4	-0,252	0,061	-0,064	-4,098	0,000	0,672	1,487
	BOLG5	-0,450	0,048	-0,154	-9,422	0,000	0,611	1,636
Marital Status								
	CUMARR	-0,610	0,037	-0,240	-16,695	0,000	0,792	1,262
	FMARR	-0,623	0,075	-0,118	-8,345	0,000	0,812	1,232
Migration Duration								
	MIYEART	-0,004	0,001	-0,035	-2,652	0,008	0,944	1,060
Region of Previous Residence								
	ORREG2	-0,019	0,058	-0,006	-0,332	0,740	0,473	2,113
	ORREG3	-0,007	0,044	-0,003	-0,168	0,867	0,431	2,320
	ORREG4	0,099	0,050	0,034	1,978	0,048	0,542	1,846
	ORREG5	-0,169	0,043	-0,075	-3,968	0,000	0,457	2,188

Although there is no collinearity problem for the variables used in the second model as presented in Table 12, for the migrant women, whose region of previous residence is South (ORREG2) and Central (ORREG3) variables seem to be statistically insignificant in 0,01 confidence level. Among the migrant women, the most negative effect is observed for rural-to-rural

migrants (standardized β coefficient is –0,338). However, a similar effect is valid for rural-to-urban migrants (-0,313). The effect of de jure region of residence seems to be undifferentiated (except for North) and each additional year spent in current place of residence decreases factor score (dependent variable) by –0,035. Model also shows that the different origin region of the migrant women does not affect the status of women significantly. Then, according to the second model, the least advantageous group of migrants are the ones that moved from rural to rural within East, who are currently married and have spent more years in the destination.

CONCLUSION AND DISCUSSION

The results of this study are very significant in terms of a better interpretation of socio-economic and cultural processes within the Turkish society as well as the factors and other social events, which influence the alteration and/or structure of demographic processes (i.e. fertility, mortality and migration) individually or in relation with each other. In fact, none of these socio-economic, cultural and demographic elements are capable of changing themselves alone, but they are all linked to and intervening into each other's conditions.

If it is necessary to concentrate on the topic of this study, the main goals of the study is to explore the (inter)-relationship between them, how one shape the other and whether migration and status of women is possible to be examined by a data like TDHS 1998, whose purpose is to find out demographic information about fertility, mortality and mother and child health rather than geographical mobility of people (ie. migration) or gender-related issues (ie. status of women, empowerment of women, etc.). In other words, this study is unique because of the methods and assumptions used in it in order to reach at the information for expected population (migrant women) and its characteristics (indicator to measure status of women). Although these methods are not claimed to have no other alternative to measure them, they were observed to be sufficient to operate indirect analyses for migration and gender-related issues by using demographic and health surveys data. Limitations, advantages and disadvantages of a DHS data is discussed below in the light of the results of both descriptive and multivariate analyses.

There are some limitations for migration information within TDHS 1998 women's data set. For example, the amount of "Other" responses for the main reason to move variable is relatively high and it limits the number of cases that were considered to move because of socio-economic reasons (eg. education, finding job, etc.) and family-related reasons (eg. marriage and joining to parents). One way of getting rid of this problem is to scrutinize open-ended "other" answers to construct new close-ended categories, which can be used to classify in socio-economic and family-related reasons. A more crucial problem is the inability of the data to serve the numbers and duration of possible former geographical moves prior to the last migration. Data only provide the last move from somewhere to another and all other migration information like years lived in actual place of residence, type of previous place of residence and previous region of residence belong this individual last move. A more detailed migration history of the interviewed women, which includes all other moves would help the researcher to construct further categories about migration, which would be useful in analyzing other demographic and socio-economic events by DHS.

By having these weak and strong aspects, constructed migration history for TDHS 1998 in this study produced significant results. For instance, it was found out that more than half of the respondents experienced migration at least once before TDHS 1998. Moreover, migration has important effects on other demographic processes. The age structure of the female population of the destination is heavily affected by the newcomers for certain ages. Furthermore, the rural-to-urban

migrants are not homogenous in themselves and they are exposed to different patterns of fertility behaviour; as the time spent in destination increases, total fertility rate decreases. In addition to them, other socio-economic characteristics of rural-to-urban migrant women are diversified like education, income and previous region of residence, which are also influential on fertility of migrant women.

The other topic held in this study is the measurement of the status of women by using a quantitative data is a very critical attempt, which is open to debate in many aspects. The reason is that gender issues and the social status and position of women are the topics, which contain knowledge that can not be measured by only quantitative information like education, employment status, age, marital status or fertility. Intra-household power relations among men and women, the ability of women to be included into the public sphere and their abilities to access and control the resources are all highly subjective issues, which is hard to comment on the better off or worse off social position of women in the society. Despite this demarcating effects of the highly subjectivity of the issue, it was assumed that the demographic and socio-economic information of women in TDHS 1998 data are the clues for a research to examine the status of women. Fortunately, descriptive analyses showed that the variables that are thought to be important for the study of status of women by DHS data (ie. age, education, fertility, employment, social security, migration) are very significant in pointing out the women's better and worse conditions, which shape their social positions and decision-making freedoms.

However, descriptive variables do little in explaining the status of women. The idea of creating an index is attractive in terms of scaling all women from the lowest status to highest one by a single indicator. Although it seems to be arbitrary because of the initiative of the researcher's theoretical assumptions for entering variables and scaling the index, it was tried to maximize the objectivity by the method chosen for the multivariate analysis. It is possible to weight all the variables in different ways (by their frequency or by an equal weigh for each of them, etc.) while constructing an index. However, in this study Principal Components Analysis (PCA) method of Factor Analysis was used to find out the approximate linear relations among the used variables and the most explanatory factor was chosen and scaled by conventional intervals of the factor scores to construct Status of Women Index (SWI). In the use of SWI, it was observed that the index works well enough in explaining the differences among rural-urban and migrant and non-migrant populations.

In the end of all of those descriptive and multivariate analyses, it is believed that there are significant links between the rural-to-urban migration and status of women in Turkey. It was found out that rural-to-urban migration positively affect women's lives not only increasing their scores on SWI, but also in lowering fertility rates and access to social security services. Moreover, although the number of employed rural-to-urban women is lower than the rural women's, the share of permanent jobs in overall employed women is higher among migrant women. In sum, migrant women seem to be better of than their rural counterparts. However, rural-to-urban migrant women still have SWI scores below urban-oriented women and they play an additive role in increasing total fertility rate in the urban especially with their high fertility in the first ten years of migration when compared to very low total fertility rates of urban immobile and urban-to-urban migrant women.

The most important limitation in interpreting and examining the SWI scores for the migrant and non-migrant populations by TDHS 1998 is the cross-sectional nature of the survey. In other words, it is impossible to make retrospective assumptions about the status of rural-to-urban migrant women with this data set. The reason is that, fertility information, educational level, employment status and social security facility benefits are the information that belonged to the

interview day. The educational level of the migrant respondent, children born before migration and knowledge of employment and social security as well as the income level of the household before migration are unknown. In fact, SWI of rural-to-urban migrant women and other female populations according to their migration status is the description of interview day's conditions for women rather than showing the changes in status of women before and after migration. In this respect, data used in the study is limited to improve a time-dimension or lifecycle approach for status of women according to rural-to-urban migration in Turkey.

Last, but not the least, it should be noted that SWI is not a sufficient indicator alone to demonstrate the status of women. It only attempts to provide a composite variable, which gives significant results. However, further analyses should be done by using other variables. For instance marital status was not included into PCA because of the reasons discussed in previous sections of the study, but some other methods should be used to relate the effect of marriage (and divorce) on the status of women. In this respect the last part of the multivariate section, two linear regression models is applied, one belongs to all women in TDHS 1998 women's data set and the second one includes only the ever migrated women prior to TDHS 1998. The results of these analyses are very close to descriptive results of the SWI in terms of the differentiation among the factor scores of women that correspond to the well-being of these women's status according to their socio-economic and demographic backgrounds. As expected, regardless of being migrant or non-migrant, the women, who live in the East or have migrated from East and the ones that are ever married, get more negative coefficients when they are compared with the women who live in other regions. Actually, the most advantageous women populations are the ones that live in urban areas (especially urban-to-urban migrants and urban immobile women) and never married women. Despite this, being currently married affects the status of women more negatively than being formerly married, which is contrary to descriptive analysis of SWI according to marital status.

One of the significant findings of the linear regression models is that status of women is not improved by rural-to-urban migration of these women on the contrary to the results of descriptive analyses that show an extend in change in fertility behaviour and other socio-economic characteristics of rural-to-urban migrants converging with urban immobile and urban-to-urban migrant women. Rural-to-urban migrant female population gets very close beta coefficients with rural-to-rural migrant female population. Although multivariate analyses present a positively differentiating relationship between rural-to-urban migration and status of women when these migrant women are compared with rural immobile ones, there is still a significant distance observed between rural-to-urban migrants and the urban-originated women, who are namely urban immobile, urban-to-urban and urban-to-rural female migrant populations. In short, the optimistic hypothesis that argues an improvement in the status of women as a result of their change of residence from rural-to-urban seems to be not proved in the final analysis of this study.

On the basis of the findings and analyses of this study, some comments would be done in the name of getting better information on both migration and status of women in DHS. First of all, it is necessary to catch possible multiple migration moves of the sample population to analyze the step migration. Moreover, reciprocal information of women about their fertility, education, income employment status and like prior to migration should be collected in order to see the changes in the demographic and socio-economic characteristics of the migrants in the post-migration period. Furthermore, some additional questions can be asked that investigate the attitudes and intra-household relations among men and women for a deeper and more qualitative analyses of status of women.

In addition to the newly suggested questions above, some improvements can be done in existing migration module in TDHS 1998. As pointed in previous parts of conclusion section

above, the main reason to move answers should be collected more openly to overcome the problem that arise because of the big extend of "Other" responses in TDHS 1998 women's data set that would help to clarify the classification of migration reasons in socio-economic, family related or other possible close-ended categories. Another problem is the categorization of origin residences in terms of urban and rural residences. Although the current place of residence information is classified as urban and rural according to the population size of the residence (10,000 or more population is urban and less than 10,000 is rural) regardless the administrative title of the residence (whether it is province center, district center, sub-district or village), the classification of previous place of residence is done according to the administrative title of the residence. The reason is that the population size information of the pervious place of residence is not collected. An improved formulation in this question would help to determine migrant flows in a consistent way.

To sum up, TDHS 1998 women's data is rich enough to explore migration as well as the other demographic processes like mortality, fertility and morbidity. Moreover, migration information produced by this data would be helpful to observe the inter-relations among those demographic components. Furthermore, this study aimed to increase the awareness for gender-related issues in demographic studies, which would enable the demographers to see the qualitative aspects of changes in demographic processes rather than gender-blind and highly quantitative calculations of indicators. It is hopefully believed that methodology applied for migration and SWI are productive and comparable for further studies.

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ÖZET

TÜRKIYE'DE KIRDAN KENTE GÖÇÜN KADININ STATÜSÜ ÜZERİNDEKİ ETKİSİ

Bu çalışmanın amacı, Hacettepe Üniversitesi Nüfus Etütleri Enstitüsü tarafından gerçekleştirilen 1998 Türkiye Nüfus ve Sağlık Araştırması (TNSA 1998) sırasında görüşülen 15-49 yaş grubundaki kadın nüfusun kırdan kente göçünü incelemek ve kullanılan niceliksel veri setinden kadınların kırdan kente göç statüsüne göre kadının statüsü için benzeşmeleri ve farklılaşmaları ölçebilmek ve karşılaştırabilmek için bir yöntem geliştirmektir. Elde edilen bulgular kadının statüsünü ve göç akımlarını (kır-kent, kent-kent, kır-kır, kent-kır) tespit etmekte önemli sonuçlar vermiştir. Dahası, Faktör Analizi yöntemi, görüşülen kadınların demografik ve sosyo-ekonomik özellikleri kullanılarak bir Kadının Statüsü Endeksi (KSE) oluşturulmasına imkan tanımaktadır.Bulgular ayrıca linear regresyon metoduyla test edilmiş ve benzer sonuçlara varılmıştır. Betimsel ve çoklu analizlerin sonuçlarına göre, kadının kırdan kente göçünün sadece kadının, gidilen yerdeki yeni sosyo-ekonomik koşulların şekillendirilmesinde değil, aynı zamanda göçmen kadınların doğurganlık davranışına da etkileyen önemli bir faktör olduğu gözlenmiştir. Sonuç olarak, bu çalışma göç ve kadının statüsünün niceliksel olarak ölçümümün nüfus ve sağlık araştırmalarında mümkün olduğunu ve bu tür çalışmaların benzer diğer çalışmalarla karşılaştırılabilir olduğunu savunmaktadır.