Perception of City Attractiveness and Internal Migration in Korea

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I. Introduction

The unbalanced rapid urban growth of the developing world and the consequences there of in spatial distribution of population suggested this research on the relationship between the city-ward migration and the attractiveness of cities in Korea. Since the 1960s, the urbanization of Korea has been progressing at a rapid pace. The urbanization level in 1960 was 28.0 percent, which increased to 65.4 percent as of 1985. One of the most serious consequences of such rapid urbanization is the increasing spatial polarization of population in the Capital Region, where about 40 percent of the national total population is currently concentrated.

The over-concentration of population in Seoul, and recently in its satellite cities too, has been a serious problem especially because of the city's proximity to the Demilitarized Zone dividing North and South Korea. The seriousness of Korea's population distribution problem lies in the fact that such a result has occurred in spite of the government's strenuous efforts to disperse Seoul's population and curb further increases since the mid-1960s.

This raises a question about the relevance and effectiveness of the population redistribution policy measures so far adopted in Korea. However, we cannot evaluate the policy measures properly, nor suggest better alternatives, until we are fully aware of the determinants as well as the mechanism of human migration behavior. In this regard, this study has aimed at explaining the city-ward migration in Korea in relation to city attractiveness, both objective, via a behavioral geographical approach.

II. Theoretical Background

Behavioral or perception studies in geography and in related disciplines dealing with man-environment relationships find a common, theoretical framework in what has been termed cognitive behaviorism. The theoretical premise of cognitive or environmental behaviorism is based on the assumption that man reacts to his environment as he perceives and interprets it through previous experience and knowledge.

The application of the behavioral approach to migration research was initiated by Julian Wolpert (1965). His theoretical model is based on the concept of place utility which is defined as "the net composite of utilities which are derived from the individual's integration at some position

in space." He argues that the individual will tend to locate himself at a place whose characteristics possess or promise a relatively higher level of utility than in other places which are conspicuous to him, and thus, the flow of population reflects subjective place utility evaluations by individuals. Although he did not provide empirical support for his hypotheses, his work heralded the development of the behavioral approach in migration and mobility research.

In spite of its potential usefulness in explaining migration behavior, the place utility concept has not been extensively applied in migration research, using appropriate data, because its transformation into specific terms has been difficult. Through a literature survey, two kinds of shortcomings were found in regard to past empirical research dealing with internal migration via place utility approach.

Most researchers(for example, Demko, 1974; Gustavus and Brown, 1977; Lieber, 1974 and 1978) concentrated their research efforts on specifying the attributes of place utility through questionnaire surveys for actual or potential migrants. However, the contents of place utility attributes are quite different from one researcher to another. Besides, their studies have not related cognitive place utility structures to actual migration models.

By contrast, some researchers (for example, Gould and White, 1974; White, 1974) measured the aggregate residential preference, or regional residential attractiveness, through quantifying respondents' attractiveness rankings or scalings. They also confirmed that the correlation between the residential preference surface and in-migration pattern was highly significant. But, the simple calculation of regional residential preference tells us nothing about migrant determinants, nor about place utility attributes, because the respondent is free to consider and weigh whatever variables were considered relevant to the basic residential preference questions.

The studies by Jones and Zannaras (1976), and Jones (1978 and 1980) are exceptional in the sense that they united these two contrastive research orientations. They measured the perceived city attractiveness of 30 cities in Venezuela in terms of two place attributes, economic opportunity and quality of life, by converting respondents' attractiveness rankings following the computation procedure suggested by Peter Gould (1966). In their studies, in-migration rates to those 30 cities in 1971 were regressed on objective measures of economic opportunity and the quality of life, which was able to explain 65 percent of the variation in young adult in-migration rates. When measures of perceived attractiveness of the cities were added, the variance explained rose remarkably to 83 percent. Their studies, however, are not satisfactory in three aspects as follows:

First, the remarkable increase of R-square is a good evidence to support the importance of perceptual factors in explaining migration phenomena. But, this does not necessarily imply that the perceived city attractiveness measures explain better the migration flow than the objective measures of city attractiveness.

Second, the dichotomization of place utility attributes of a city into economic opportunity and the quality of life seems to be too simple to properly specify the attributes of places in a migration decision context.

Finally, they used senior high school students as a sampling base, but, as Goodey(1971) points out, students do not necessarily represent the opinion of potential migrants in general.

III. Research Design

In order to improve the shortcomings of past researches on a place utility approach, I suggested in this study a research design as follow:

1) Seven categories of place utility attributes, or city attractiveness, were selected through a broad literature survey on migration determinants and the consideration of Korea-specific characteristics. They include income and wealth, job opportunity, educational opportunity, housing situation, the quality of urban facilities, the presence of friends or relatives, and social mobility opportunity.

2) To get information on subjective city attractiveness, a questionnaire survey was conducted between August 1, 1983 and August 31, 1983 in Ch'ungbuk province, which is located at the geographical center of South Korea. Out of a total of 720 sampled household heads 522 responses (285 from urban region and 237 from rural region) were satisfactorily completed. Respondents were asked to rank-order 36 cities, whose population size was 100,000 or over as of 1983, on each of the seven attributes, and also on the overall city attractiveness considering all other possible factors in addition to the seven attributes.

3) Subjective city attractiveness measures in terms of those eight categories were computed by converting attractiveness ranking matrices to score terms through a quantitative procedure as follows:

STEP 1: Building a data matrix with 36 city rows and n respondents.

n Respondents

$$R_{11}R_{12}R_{13}\ldots\ldots\ldots\ldots\ldots\ldots R_{1n}$$
$$R_{21}R_{22}R_{23}\ldots\ldots\ldots\ldots\ldots\ldots R_{2n}$$

m Cities (36 cities in this research)

$$R_{31}R_{32}R_{33}\ldots\ldots\ldots\ldots\ldots\ldots R_{3n}$$

$$R_{m1}R_{m2}R_{m3}\ldots\ldots\ldots\ldots\ldots\ldots R_{mn}$$

note: R_{ij} denotes the attractiveness rank of a city i by a person j.

STEP 2: Calculation of the rank correlation coefficients between all possible pairs of people($n \times n$ Correlation Matrix).

STEP 3: Calculation of the best weights by applying a Principal Components Analysis to the $n \times n$ correlation matrix of STEP 2. The best loading value, or first component score, represents his or her correlation with the most general, shared viewpoint.

STEP 4: Calculation of attractiveness scores of a city i.

$$AS_i = \sum_{j=1}^{n} R_{ij}{}^* L_j$$

where,

AS_i: Attractiveness score of a city i,

R_{ij}: The rank-order of a city i ranked by a person j,

L_j: The best weight of a person j.

At this stage, the best-liked city has the smallest score; whereas, the least-liked city does have the largest score.

STEP 5: Transformation of the attractiveness score so that the best-liked is accorded the largest number.

$$TS_i = \frac{K}{AS_i}$$

where,

TS_i: Transformed attractiveness score of a city i,

AS_i: Original attractiveness score of a city i,

K: Scalar.

By repeating this procedure, eight kinds of perceived attractiveness scores for each city, including seven attribute scores and one overall score, will be derived.

4) Objective city attractiveness measures were represented by various socio-economic indicators calculated from published data for six place utility attributes out of the seven categories. The social mobility opportunity was excluded because its measurement was so difficult.

5) The misperception of city attractiveness was represented by the value of the difference in Z-scores between the perceived attractiveness of a place attribute of a city versus the corresponding objective attractiveness attribute of the city. On the other hand, the overall misperception of city attractiveness was represented by the residual term of the regression model whose de-

pendent variable was overall subjective city att-
ractiveness score and whose independent varia-
bles were six objective attractiveness measures.

6) The number of out-migrants from Ch'ung-
buk province to each city of Korea in 1983 was
used as the dependent variable for various ana-
lyses in this research. The data included out-
migrants from both urban and rural regions of
the province.

IV. The Model

1. The Relation between City Attractive-
ness and Migration

To find the relationship between migration
volume toward a city from an origin region and
the city attractiveness attributes of that city,
both the objective measures and the correspon-
ding subjective ones, the following models are
proposed:

$$M_i = f(IN_i^0, \ E_i^0, \ ED_i^0, \ H_i^0, \ UQ_i^0,$$

$$FR_i^0, \ D_i) + R_1 \cdots\cdots\cdots\cdots\cdots\cdots\cdots (1)$$

$$M_i = f(IN_i, \ E_i, \ ED_i, \ H_i, \ UQ_i, \ FR_i,$$

$$S_i, \ D_i) + R_2 \cdots\cdots\cdots\cdots\cdots\cdots\cdots (2)$$

The superscript 0's in equation (1) denote
objective attributes which are defined as follows:

M_i : The number of migrants toward a city
i from Ch'ungbuk province in 1983,

IN_i^0 : The average per capita income of a
city i in 1983,

E_i^0 : Number of employees or workers per
10,000 citizens of a city i in 1983,

ED_i^0 : Number of students per 10,000 citiz-
ens of a city i in 1983,

H_i^0 : "Housing diffusion ratio" of a city i
in 1983,

UQ_i^0 : Index of Quality of Urban facilities
of a city i in 1983, which is developed
from various indicators such as piped
water diffusion ratio, number of telep-
hones, area of urban public parks, floor

area of shopping facillities, number of
medical personnel, number of policemen
and firemen, and number of welfare
institutions of the city.

D_i : Shortest road distance from the geogra-
phic center of Ch'ungbuk province to
a city i,

FR_i^0 : A surrogate measurement for 'presence
of friends or relatives' which, we sug-
gest, is defined as the number of in-
migrants during the previous four years
from Ch'ungbuk province, divided by
10,000 citizens, for each destination city.

R_1, R_2 : Residual terms.

Independent variables of equation (2) denote
respectively the perceived city attractiveness of
a city i in terms of income level (IN_i), employ-
ment opportunity (E_i), educational opportunity
(ED_i), housing situation (H_i), quality of urban
facilities (UQ_i), presence of friends or relatives
(FR_i), and social mobility oppportunity (S_i).

2. The Influence of Misperception on Mi-
gration Variation

Subjective city attractiveness as perceived by
people does not always conform to the actual,
or objective, city attractiveness. For a given city,
one may have an inflated perception (or over-per-
ception) of its attractiveness, whereas another
may have a deflated perception (or under-percep-
tion). In this study, such a wrong perception
is defined as the "misperception" of city attrac-
tiveness.

If we symbolize the misperceptions as α_i,
IN_i^r, E_i^r, ED_i^r, H_i^r, UQ_i^r, and FR_i^r, which res-
pectively denote the misperception in terms of
overall attractiveness, income level, employment
opportunity, educational opportunity, housing
sitution, quality of urban facilities, and presence
of friends and relatives of a city, the following
two relationships can be formulated:

$$\alpha_i = f(IN_i^r, \ E_i^r, \ ED_i^r, \ H_i^r, \ UQ_i^r, \ FR_i^r)$$

$$+R_3 \cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots (3)$$

$$M_i = f(IN_i^r, \ E_i^r, \ ED_i^r, \ H_i^r, \ UQ_i^r, \ FR_i^r)$$

$$+R_4 \cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots (4)$$

Here, M_i is again the number of migrants toward a city i from Ch'ungbuk province and R_3 and R_4 are the residual terms.

V. The Findings

1. A Comparison of Two Interpretations: The Objective vs. The Subjective

Table 1 compares the beta coefficients and R-squares of the final step regression model between objective and subjective interpretations for two categories of out-migration from Ch'ungbuk province, one from urban regions and another from rural regions, to the 36 selected cities.

Both interpretations show similar pattern in terms of independent variables selected in the final step regression model for both categories of migration. Except for the job opportunity attribute, the sign as well as the significant levels of beta coefficients are nicely coincident with

each other for both migration categories. However, the most dramatic difference between two interpretations lies in the level of R-squares. Subjective city attractiveness attributes explain about 95 percent of total variance of migration flows. By contrast, the objective attributes can explain less than 60 percent.

Judging from such a large gap of R-square level between the subjective and the objective interpretation of migration flow, there seems to exist an apparent spatial bias with the geographic distribution of perceived city attractiveness. To confirm this, two types of rankings for each city, one based on objective city attractiveness score set, and another based on subjective score set, were compared. If a city is ranked higher by the subjective scores than by the objective scores, the city is considered to be over-perceived; whereas, if ranked lower, it is considered as under-perceived.

Tables 2 and 3 compare the subjective rankings for 36 cities as perceived by urban and rural respondents, respectively, with corresponding objective city attractiveness rankings for the

Table 1. Comparison of Beta Coefficients Between Objective and Subjective Regression Models by Migration Category (N=36) (t-values in Parentheses)

Independent Variables	Categories of Migration			
	City-Ward Migrants of Urban Origin		City-Ward Migrants of Rural Origin	
	Object.	Subject.	Object.	Subject.
Job Opportunity	−0.3625*(5.71)	0.9599***(563.03)	−0.2679(3.37)	0.7677***(181.55)
Income Opportunity	0.8970***(34.45)		0.7899***(29.30)	
Friends/Relatives			0.4520***(15.60)	0.2602***(20.86)
Road Distance	−0.2882*(5.84)	−0.0873*(4.66)		
R²	0.5534	0.9466	0.5870	0.9508
F-Value	13.22	292.36	15.16	319.12

* Significant at .05 level
** Significant at .01 level
*** Significant at .001 level

Note: 1) All the coefficients in this table are final step results of backward stepwise regression.
2) In the case of subjective regression model, only three variables—job opportunity, presence of friends/relatives, and road distance—were input at step 0 to avoid multicollinearity problem, because the city attractiveness attributes of job opportunity, income opportunity, educational opportunity, the quality of urban facilities, and the social mobility opportunity are highly inter-correlated.

Table 2. Objective VS. Subjective Ranking of 36 Cities in Terms of City Attractiveness by Urban Respondents

City	Categories of City Attractiveness											
	Job		Income		Education		Housing		Q.U.F.		P.F.R.	
	O.R.	S.R.	O.R.	S.R.	O.R.	S.R.	O.R.	S.R.	O.R.	S.R.	O.R.	S.R.
Seoul	3	1*	1	1	9	1*	23.5	36	1	1	7	2*
Pusan	10	4*	9	2*	18	4*	33	34	19	2*	27.5	10
Taegu	15	5*	12	4*	11	5*	32	33	20	3*	25	9*
Inch'on	8	6*	6	3*	13	6*	18	35	29	5*	18	7*
Suwon	12	7*	8	7*	7	7	22	26	35	8*	12	8*
Songnam	19.5	13*	23	12*	27	11*	35	23*	33	11*	14	12*
Uijongbu	21	19*	27	19*	28	16*	28	31	26	15*	21	18*
Anyang	4	10	4	15	23	12*	7	22	30	12*	13	11*
Puch'on	6	11	11	14	22	13*	31	27*	28	13*	10	13
Kwangmyong	36	21*	36	20*	34	15*	17	30	36	16*	8.5	17
Ch'unch'on	27	17*	20	17*	3	10	8	12	5	10	19	14*
Wonju	30	28*	24	28.5	15	19	5	7	4	23	4	16
Kangnung	31	24*	32	28.5*	10	28	10	8*	3	26.5	16	25
Tonghae	29	36	34	36	36	36	2	9	17	35	15	36
T'aebaek	9	35	35	35	35	35	1	11	34	36	8.5	33
Ch'ongju	14	2*	13	6*	1	2	19	1*	12	6*	3	1*
Ch'ungju	28	18*	31	22*	20	14*	6	2*	11	19	2	4
Chech'on	35	25*	33	32*	33	27*	12	3*	23	32	1	5
Taejon	18	3*	17	5*	8	3*	30	5*	18	4*	5	3*
Ch'onan	16	23	21	30	17	17	25	4*	27	26.5*	6	6
Chonju	23	14*	19	13*	5	9	26	16*	10	9*	32	22
Kunsan	19.5	27	18	24	16	30	23.5	14*	21	28	31	26*
Iri	13	30	22	26	2	31	20	13*	14	29	29	31
Kwangju	26	8*	16	8*	6	8	29	32	6	7	25	19*
Mokp'o	22	26	26	25*	21	29	15	21	9	25	36	30*
Yosu	25	34	25	33	31	33	11	28	22	33	30	35
Sunch'on	34	33	28	34	26	32	3	20	7	34	34.5	34*
P'ohang	5	9	5	9	29	23*	27	17*	25	21*	21	21
Kyongju	24	22*	30	21*	30	21*	14	15	8	17	33	28.5
Andong	32	31*	29	31	14	22	21	6*	15	30	23	15*
Kumi	1	15	3	16	25	18*	16	10*	2	18	17	20
Masan	11	20	7	18	12	24	34	24*	13	22	27.5	27*
Ulsan	7	12	2	10	24	25	36	18*	32	20*	11	23
Chinju	17	29	14	23	4	26	13	19	16	24	34.5	28.5*
Ch'angwon	2	16	15	11*	19	20	9	25	31	14*	21	24
Chinhae	33	32*	10	27	32	34	4	29	24	31	25	32

* Signifies over-perceived rank.
O.R. and S.R. mean objective ranking, subjective ranking respectively.

Table 3. Objective VS. Subjective Ranking of 36 Cities in Terms of City Attractiveness by Rural Respondents

City	Categories of City Attractiveness											
	Job		Income		Education		Housing		Q.U.F.		P.F.R.	
	O.R.	S.R.	O.R.	S.R.	O.R.	S.R.	O.R.	S.R.	O.R.	S.R.	O.R.	S.R.
Seoul	3	1*	1	1	9	1*	23.5	36	1	1	13	2*
Pusan	10	4*	9	2*	18	4*	33	35	19	2*	21	9*
Taegu	15	6*	12	4*	11	5*	32	33	20	4*	24	8*
Inch'on	8	5*	6	3*	13	6*	18	34	29	3*	14	6*
Suwon	12	7*	8	8	7	7	22	23	35	8*	11	10*
Songnam	19.5	13*	23	18*	27	10*	35	30*	33	13*	6.5	13
Uijongbu	21	11*	27	21*	28	15*	28	21*	26	15*	17	14*
Anyang	4	12	4	15	23	14*	7	28	30	11*	6.5	11
Puch'on	6	9	11	17	22	13*	31	29*	28	12*	5	16
Kwangmyong	36	20*	36	19*	34	16*	17	31	36	16*	9	23
Ch'unch'on	27	15*	20	14*	3	12	8	11	5	10	22	17*
Wonju	30	22*	24	29	15	18	5	8	4	23	10	19
Kangnung	31	28*	32	32	10	24	10	10	3	26	23	24
Tonghae	29	36	34	36	34	36	2	7	17	36	20	33
T'aebaek	9	35	35	35	34	35	1	9	34	35	16	34
Ch'ongju	14	2*	13	6*	1	2	19	1*	12	6*	1	1
Ch'ungju	28	10*	31	22*	20	11*	6	2*	11	17	3	3
Chech'on	35	21*	33	34	34	20*	12	3*	23	31	2	5
Taejon	18	3*	17	5*	8	3*	30	6*	18	5*	4	4
Ch'onan	16	23	21	33	17	17	25	4*	27	20	12	7*
Chonju	23	14*	19	12*	5	9	26	25*	10	9*	32	18*
Kunsan	19.5	29	18	24	16	30	23.5	16*	21	30	34	27*
Iri	13	30	22	27	2	29	20	15*	14	32	28	32
Kwangju	26	8*	16	7*	6	8	29	32	6	7	30	12*
Mokp'o	22	31	26	23*	21	31	15	13*	9	27	35	22*
Yosu	25	34	25	28	31	34	11	20	22	34	33	35
Sunch'on	34	33*	28	30	26	32	3	14	7	33	36	36
P'ohang	5	16	5	10	29	27*	27	17*	25	19*	19	25
Kyongju	24	26	30	25*	30	26*	14	18	8	18	29	28*
Andong	32	24*	29	31	14	19	21	5*	15	28	26	15*
Kumi	1	18	3	13	25	25	16	12*	2	22	8	26
Masan	11	25	7	16	12	28	34	27*	13	25	27	29
Ulsan	7	19	2	11	24	22*	36	24*	32	21*	15	21
Chinju	17	27	14	20	4	23	13	19	16	24	31	30*
Ch'angwon	2	17	15	9*	19	21	9	22	31	14*	18	20
Chinhae	33	32*	10	26	34	33*	4	26	24	19*	25	31

* Signifies over-perceived rank.
O.R. and S.R. mean objective ranking, subjective ranking respectively.

Table 4. Beta Coefficients and R² of the Regression Model Between Migration and Misperception Attributes by Migration Category (N=36)

(t-values in Parentheses)

| Attributes of Misperception | Categories of Migration | | | |
| | City-Ward Migrants of Urban Origin | | City-Ward Migrants of Rural Origin | |
	Step 0	Final	Step 0	Final
Job Opportunity	0.3743* (7.14)	0.3855*** (15.68)	0.2893* (5.88)	0.2364* (6.77)
Income Opportunity	−0.0415 (0.04)		−0.1183 (0.50)	
Educational Opportunity	0.3707** (7.87)	0.4195*** (15.62)	0.3394** (8.85)	0.3370** (12.63)
Housing Situation	0.0453 (0.28)		0.1976* (5.84)	0.2027* (6.64)
Quality of Urban Facilites	0.0674 (0.30)		−0.0047 (0.00)	
Presence of Friends/Relatives	0.1253 (1.03)		0.5186** (10.27)	0.5219** (11.79)
R²	0.6367	0.6059	0.7193	0.7144
F-Value	8.47	25.37	12.38	19.39

   * Significant at .05 level
  ** Significant at .01 level
 *** Significant at .001 level

same cities. For all city attractiveness attributes except for the housing situation, all special cities and most cities in Kyongki province are over-perceived by respondents. In the case of the housing situation, these cities are mostly under-perceived. Most cities in the home province, Ch'ungbuk, and adjoining Ch'ungnam province are over-perceived for all categories of attributes. By contrast, with the exception of a few cities for the attributes of housing situation and the presence of friends or relatives, most cities located in other provinces are under-perceived for all categories of city attractiveness attributes.

2. Misperception of City Attractiveness and Migration

In order to analyze how much the misperception attributes of city attractiveness altogether explain city-ward migration flows from Ch'ungbuk province, a backward stepwise multiple regression analysis was employed. As Table 4

shows, both categories of migration show high R-squares, 0.6059 for migrants of urban origin and 0.7144 for those of rural origin. An interesting thing is that migrants of rural origin have higher R-square than those of urban origin. The pattern such as this can be explained by the difference in the amount of information people have concerning city attractiveness. Generally speaking, there are more diverse and better information channels in urban areas than in rural areas. Therefore, it seems natural that urban residents can accumulate more diverse as well as more nearly correct information on city attractiveness than can rural residents.

As the independent variables selected in the final step regression models indicate, the kinds of misperception attributes that are influential for the city-ward migration flows are also different between urban and rural regions of origin. Migrants from urban regions are mainly influenced by two misperception attributes, educational

Opportunity and job opportunity, of which the former is slightly more significant than the latter. In the case of city-ward migrants from the rural region of Ch'ungbuk province, four misperception attributes—job opportunity, educational opportunity, housing situation, and the presence of friends or relatives—are all significant at the 0.05 level or less. In terms of the magnitude of beta coefficients, the misperception of "the presence of friends or relatives" is the most influential, which is followed by educational opportunity, job opportunity, and the housing situation.

Judging from the multiple regression result, the presence of misperception in people's minds is believed to be the most important reason why the subjective measurements of city attractiveness are so highly correlated with city-ward migration flows. This is supported by the fact that the R-square of misperception measurements per se is even greater than that of objective city attractiveness scores in explaining the flow of city-ward migrants from Ch'ungbuk province for both categories of migration analyzed in this study (compare Table 1 with Table 4).

This finding also supports the basic premise of cognitive behaviorism, which hypothesizes that man reacts to his environment as he perceives and interprets it through previous experience and knowledge.

VI. Conclusion: Policy Implications

Since the mid-1960s, various population redistribution policy measures have been adopted by the Korean government, mainly to relieve the excessive population concentration in Seoul. To achieve this goal, the policy priority has been given to both 'urban constraint' type of programs aiming at stopping or slowing down in-migration, and 'accommodationist programs' aiming at promoting the relocation of people and industrial facilities from Seoul to surrounding Kyongki province.

Despite the government's strenuous efforts, the population concentration in Seoul has not been relieved at all. To make matters worse, the recent trend of rapid population increase in Seoul's satellite cities has become another problem. Accordingly, the recent policy concern to control population concentration has been expanded to the Capital Region as a whole.

In view of the findings from this study, the continued concentration of people toward Capital Region is, to some extent, due to the imperfection of past population redistribution programs themselves which have not taken into full consideration the characteristics of city-ward migration behavior. For example, the development of satellite cities within commuting distance of Seoul seems to have encouraged migration toward the Capital Region from the rest of the country. In 1980, 44.8 percent of total city-ward migration from Ch'ungbuk province headed for cities in the Capital Region, and increased to 51.8 percent in 1983.

On the basis of the findings of this study, several policy guide-lines are suggested for improving population distribution in Korea.

1) Policy emphasis needs to be placed on increasing the attractiveness of regional centers to counter-balance the current monopolization of city attractiveness in the Capital Region.

2) Policy priority should also be given to more integrated rural development so as to promote the retention of rural population in their home area.

3) To improve the effectiveness of policy measures, it is necessary to develop more comprehensive population redistribution programs to match more closely the determinants of human migration behavior. Factors such as job opportunity, income opportunity, educational opportunity, the quality of urban facilities, and the

social mobility opportunity are especially important determinants of city-ward migration in Korea.

4) As is confirmed in this study, human migration is a delicate function of subjective evaluations of city attractiveness, which are influenced by misperceptions people have in mind, rather than of objective evaluations. Plans that are simply designed to reverse the objectvc characteristics of urban places cannot guarantee the wished-for changes in migration flows. Therefore, a direct attack on misperceptions to change popular attitudes toward the Capital Region and large metropolises could also be another good policy alternative. In this regard, the transfer of many of Seoul's functions to regional centers and the greater realization of local autonomy would be helpful in increasing the level of city attractiveness of both regional centers and local cities. In addition, efforts to close the gap between objective city attractiveness and its subjective perception through information programs are also believed to be a useful population distribution policy alternative.

There is strong evidence that information programs have a great influence on changing the pattern of human migration. In a recent field experiment study in Thailand (Lightfoot, Hull, and Fuller, 1983:277-287), the researchers compared two observation groups of rural people, one with a deliberate introduction of information about jobs in local and regional towns through an information program for a certain period of time, and another without such information. They found that the program had the effect of encouraging higher rates of movement to northeastern towns of Thailand among the people of the informed group. Based on these findings, the researchers conclude that the propagation of information (about jobs) is a necessary component of any general decentralization strategy.

Judging from this, we believe that the misper-

ception of city attractiveness can also be changed through information programs. In this regard, efforts through the mass media and school education to decrease the over-perception people have of the attractions of the Capital Region and other large metropolises, and also to inform people about the merits of life in small cities or rural areas, are worth considering as long-term policy measures. Such efforts may be less expensive and more rewarding than existing policy measures intended to change population distribution.

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都市魅力度와 人口移動

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　이 연구는 우리나라에 있어서의 都市로의 인구이동과 도시매력도와의 관계를 「認識—行態」論的인 관점에서 설명하려는데 그 목적이 있다. Julian Wolpert (1965)의 "場所效用接近方法"으로 체계화된 이 理論의 要旨는 사람들이 移住對象地를 결정함에 있어서 그 대상지의 객관적인 매력도 보다는 자신들이 갖고 있는 정보를 토대로 주관적으로 판단한 이른바 "認知된 魅力度"에 좌우된다는 점이다.

　이 연구에서는 우리나라의 자료를 토대로 Wolpert의 가설을 검증하여 보았다. 인구이동의 관점에서 본 도시매력도의 구성요소를 (1) 소득수준, (2) 취업기회, (3) 교육기회, (4) 주거사정, (5) 도시시설의 질, (6) 移住時 도움을 받을 수 있는 親知의 有無, (7) 社會的 成就機會 등 7개 항목으로 분류하여 우리나라의 도시들을 객관적인 매력도와 주관적인 매력도로 計量化하였다. 객관적인 매력도는 기존의 통계자료를 指標化하여 측정하였고, 주관적인 매력도는 충청북도 住民들을 대상으로 1983년 현재 인구 10만 이상의 36개 도시에 대한 매력도 순위 설문조사를 통해 계량화하였다. 이들 매력도를 독립변수로 하고 충북으로부터 각 도시로 진출된 인구를 종속변수로 하여 통계적 분석을 한 결과 객관적인 매력도는 인구이동 현상을 55~58% 설명하였으나, 주관적인 매력도는 약 95%정도 설명하는 것으로 나타나 인구이동 의사결정이 주민들에게 認知된 주관적 매력도에 크게 의존하고 있음이 판명되었다. 따라서 학교교육이나 대중매체를 이용한 장기적인 「인포메이션 프로그램」을 개발하여 農村生活이나 中小都市에서의 生活의 장점을 널리 계몽하여 도시의 주관적 매력도와 객관적 매력도 간의 간격을 좁혀주는 정책도 매우 有用한 大都市 人口分散政策代案의 하나가 될수 있을 것이다.