

An Exploratory Approach to Changes in Jobs for Female Workers: A Focus on Data on Job Change from the Korean Longitudinal Survey of Women and Families

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Abstract

Using data from the 2011 Korean Longitudinal Survey of Women and Families, this study looks at the continuance and changes of jobs for women, change types and change characteristics in the future according to category. Overall, no major changes could be seen in job types for wage earners, sole business owners, unpaid domestic laborers and special type workers. However, differences in job change could be seen when the characteristics of employment form and demographic economics are considered. Among wage earners, irregular/part-time workers had a higher possibility of changes in jobs than regular/full-time workers. Non-paid workers showed differences according to age and educational attainment level. Those in the 20s and 30s with educational attainment of university level and above showed shifts from wage earning jobs to wage earning jobs, while those in their 40s with educational attainment of high school level showed changes between self-employment and special type worker jobs. Those in their 50s and 60s with middle school-level education showed noticeable changes in domestic unpaid work. Female employment shows existence of segmentation in these ways, and there is a connection with employment instability. In addition, it can be said that there is a link between female employment and life cycle, and it shows an overall declining tendency.

Keywords: Female employment, Job change, Polarization, Career interruption, Correspondence analysis

I. Introduction

The recent Korean labor market is showing characteristic changes of flexibility and segmentation, which bring about various problems to many workers. On the whole there has been an increase in irregular workers and such changes are more evident for lower level jobs. Labor market flexibility and segmentation bring about the problem of job instability. Non-regularization is not a temporary state, and is a trap which workers find hard to free themselves from (Jae-ryang Nam, Tae-gi Kim, 2000; Jun Han, Ji-yeon Jang, 2000). As a result, such employment instability in the labor market leads to the economic insecurity of workers (Yu-seon Kim, 2005).

The Korean labor market has experienced changes as a result of higher educational attainment of women and an increased need for female workers (Mary et al, 1995), nominal participation in the labor market has steadily increased. However, gender gaps still remain in the labor market in various areas. Problems include the fact female workers show a higher turnover in the labor market and the increase of female workers in contractual jobs. (Yeong-ran Kim, 2006; Hyeon-ju Min, 2011). The percentage of women participating in economic activity as of 2010 was 49.4%. This shows a 0.6% increase from the percentage in 2000 of 48.8%. Waged workers account for 72.9% of employed females. The proportion of waged workers has increased while the proportion of non-paid workers consisting of self-employed people and unpaid family workers has decreased. However, regular employees accounted for a mere 34.5%, while temporary workers and casual workers accounted for 30.3% and 8.4% respectively. The percentage for female regular workers was 13.4% lower than that of males (47.9%) but 16.3% higher for temporary and casual work than males (22.1%)¹ (Statistics Korea, 2011).²

The reality of the employment status of female workers in the labor market is reflected in living standards. As at 2005, female wages were at an average of a mere 61% of that of males. This is the biggest difference compared to other OECD countries (OECD, 2008).³

1 An 'M'-shaped pattern can be seen according to age for female participation in economic activity. Those in the 25-29 age group accounted for the highest proportion at 69.8% and fell for the age group 30-34 to 54.6% for the childrearing periods. A rebound can be seen from the late 30s (Statistics Korea, 2011).

2 A segmentation tendency of female participants in economic activity is an increase of specialized jobs. The percentages of females passing the 2010 Civil Service Examination, Foreign Service Examination and Bar Exam were 47.7%, 55.2% and 41.5% respectively. At only 10.9% in 1980, the percentage of female dentists stood at 24.9% in 2009, showing more than a two-fold growth. For the same periods, oriental doctors also went from 2.4% to 16.4%, which is almost a 7-fold growth.

3 New Zealand showed the smallest gender pay gap – supposing a male worker was paid 100 dollars on average, a female worker was paid 91 dollars. This was followed by France (89) and Poland (89) (OECD, 2008).

In terms of qualitative aspects, the following could be found⁴. Not only are a high number of female irregular workers, but the companies they work at are usually of a small scale and their positions are usually low-ranking. Female workers were largely concentrated in so-called 'pink collar' jobs, such as those in the service, clerical and production areas. The average work life was also shorter for females. As of December 2010, male waged workers spent an average of 6.24 years at their current jobs while female workers spent 3.65 years on average (Jae-ho Geum, 2011).

In relation to such characteristics of female workers, there has been recent interest in female job change. This interest lies with not only the non-regularization of the job market, but the overall job change for females, including workers who are self-employed or unpaid family workers. In particular, research on changes in female employment following the foreign exchange crisis in 1997 and financial crisis in 2008 has largely focused on unemployment and hiring. Such prior research sheds light on the characteristics of female employment in changes of hiring according to the tendency of polarization and marginalization in female job change and the career interruption arising from entering and leaving the labor market.

This study aims to examine such qualitative aspects of women's jobs through data from the Korean Longitudinal Survey of Women and Families. In particular, the study aims to focus on the changes, types of changes and future changes which can be reflected through the characteristics of the data.

II. Changes in Female Employment: The Polarization of Job Change and Career Interruption

1. The Polarization of Job Change

Along with the global flexibility of labor, a characteristic which has shown itself in the female labor market of advanced nations is polarization. As a result of labor market flexibilization, female workers are finding themselves working under flexible labor terms such as part-time work (Brunhes, 1989; Marianne, 1992). While a small proportion of women with high levels of educational attainment and high pay occupy secure positions, many female irregular workers with low-levels of educational attainment and low-paid jobs are being marginalized, resulting in a continuance of female labor market polarization (Ha-jin Jang, 2000; Mi-suk Kim, 2006).

The Korea's labor market is no exception. Increased flexibility in the labor market has brought about job change and more varied employment types, resulting in a higher risk of women

⁴ It was judged to be easier for females to get lower wages and less work-related training as well as authority and benefits than males (Reskin, 1993).

than men to enter marginal jobs and more restricted opportunities to change to a better job, instead changing to worse jobs (Hyeon-ju Min and Hee-jeong Im; 2009). Also, while male workers are more likely to change jobs without experiencing unemployment, for female workers there is a higher ratio who leave the labor market and enter a state of non-economic activity (Hye-won Kim et al, 2007; Tae-hong Kim et al, 2002). Also, it was found that compared to men, when changing jobs women were less likely to be recognized for their past work experience and as a result more likely to change job type or industry (Hye-won Kim et al, 2007).

In addition, women leave and reenter the labor market more frequently (Bielby, 1991). Due to factors such as marriage and childrearing in addition to sex discrimination issues, female workers tend to show more sensitive changes in state of economic activity. Also, women are still being regarded as the ones responsible for childrearing and housework (Yu, 2006). As such, women are perceived to have frequent career interruptions and this results in higher likelihood of more unstable employment upon labor market re-entry (Seong-mi Jeong, 2006). After the foreign exchange crisis in Korea an increased number of people experienced gaps in employment during job change, and even for cases where gaps were not experienced, a high number of job changes involved a change in industry or job type. Compared to men, women more frequently showed job changes in industry and job type, and these showed a significant decrease in pay compared to job changes within the same job type or industry (Byeong-hee Lee, 2005).

There were also found to be differences in job change according to educational background, and among those with high levels of educational attainment there were also differences between graduates of vocational colleges and four-year colleges (Grubb, 1997). A higher proportion of female workers tend to be low-paid irregular workers in comparison to male workers (Ju-hee Lee et al, 2006), and for women the higher the age group and the lower the educational attainment, and married women more than unmarried women had higher a likelihood of working as low-waged irregular workers (Hong-ju Park and Eun-ah Lee, 2004). A mere 15% of Korean women have a possibility of changing to a better job and for the majority of women a job change is not an effective step towards a better job but rather a frequent movement between dead-end jobs (Jin-hee Park, 2007).

2. Career Interruption

Along with the polarization and marginalization of the female labor market, another characteristic of female employment change is the re-entry into the labor market following career interruption. Although there has been a continued increase of female participants in the labor market, females workers change jobs and leave the labor market on a more frequent basis compared to male workers due to childbirth and family matters. Such career interruption brings about increased vulnerability in female employment (Myeong-suk Gu and Sang-uk Hong, 2005). Women's responsibility towards childrearing and role in the home

leads to a tendency to plan non-continuous economic activity (Caroline and Marilyn, 1994; Chuang and Lee, 2003; Yu, 2006 Hyeon-ju Min, 2011), and had a higher rate of job change than men due to personal reasons or personal or family health reasons (Sicherman, 1996). Also, even if females re-enter the labor market due to a low human capital evaluation they tend to be disadvantaged for reasons such as employment conditions, wages, job type and such factors (Seong-mi Jeong, 2006; Seo-yeong Jang, 2008; Hye-won Kim et al, 2007; Jang and Merriam, 2005), and centered on low-skilled, low-paid simple jobs (Seong-jeong Park, 2005; Su-kyeong Hwang et al, 2005). Career interruption of females in the labor market due to pregnancy and childbirth is one factor which brings about a gender gap in pay, and this consequently brings about labor turnover (Royalty, 1998).

Career interruption can be most seen in women in their late 20s to early 30s (Eun-jin Oh et al, 2009 Seong-jeong Park, 2005; Soo-kyeong Hwang et al, 2005), and the older the female, the longer the time they take to re-enter the labor market. According to generation, for women in their 20s the period of time was 1.3 years, for those in their 30s 4.3 years and for those in their 40s and over 7.7 years (Eun-jin Oh et al, 2009). In addition, it was found that after re-entering the labor market after a career interruption, 70% of women found themselves working in female-concentrated jobs (Su-mi Park, 2003)

The situation of a woman's home is an important factor in a successful career. Due to the fact females are responsible for childbirth and childrearing, housework and such roles inside the home, these tend to affect their job activity and ongoing career development, and should family life come into conflict with career development, there is the pressure to choose family over work. Career interruption arises more in women with young children, and with each additional child a woman has, her chances of getting a job decrease by approximately 13% (Eun-jin Oh et al, 2009). Among career interrupted females, approximately 45% resigned from their jobs before or after getting married, and the percentage of women who went through a career interruption before or after having their first child was an approximate 24% (Eun-jin Oh et al, 2008). Ju-yeong Kim (2010) points out that 58% of females left their jobs around the time of getting married, and 27% around the time of the birth of their first child. For the birth of a second child the percentage was 10%, and this shows that marriage and childbirth are important reasons for female's career interruption. Children's ages also have an effect on career interrupted women's re-entry into the labor market. According to Soo-kyeong Hwang (2003) approximately 50% of married women resume economic activity when their youngest child reaches the age of two. In addition, it can be seen that women who re-enter the labor market following career interruption usually find themselves in worse jobs than before. This is down to the fact that the longer the time taken off work before re-entry, the lower one's skill levels become (Ju-yeong Kim, 2010). Also, in terms of the principle reasons for job change and time spent in a job, the probability of a woman to change jobs is highest when they have been in a job for 2 years, and the probability goes down for women who have been in a job

for 2 years or more. Women who stay in a job are either unmarried or have already married and had children, and there is no noticeable difference in job change probability between man and women who have already gotten married and had children. (Chan-yeong Im, 2008)

Human capital also has an influence on re-entry into the labor market following career interruption. While women in the US with higher educational attainment re-enter the labor market at a quicker pace than women with lower educational attainment, on the contrary it was found that for Korea, women with high educational attainment either took longer than women with lower educational attainment to re-enter the labor market or there was no link between re-employment and educational attainment (Su-mi Park, 2003; Klerman and Leibowitz, 1999). In addition, shorter lengths of career interruption for women with a stronger educational background showed influence on type of job and experience whereas women with longer periods of career interruption tended to seek new job types or the establishment of their own business (Yeong-kyeong Kim, 2007).

To summarize, studies focusing on shifts in the female labor market show that the job changing patterns of women to be different to that of men, and that there are characteristic traits belonging to only women in accordance to life cycle are being brought to light in various ways. This study aims to discuss and examine such changes in detail.

III. Data and Research Methodology

1. Data for Analysis

The data used in this study is from the Korean Women's Development Institute's Korean Longitudinal Survey of Women and Families. Since 2006, the survey has been conducted three times and looks at women's status and change in economic activity and relation to family life in accordance with life cycle, changes in values in relation to family, changes in family relations, changes in family process and events, and changes in family structure with an aim of compiling a database which is not only cross-sectional but also longitudinal.

For the sampling stage, 26,000, or 10%, of regular districts (excluding facility units and island districts) of the 260,000 surveyed districts data from the National Census was selected as a sampling frame and multi-stage stratified sampling was used. Stage 1 looked at levels of urbanization, number of workers according to industry, household numbers according to accommodation type and these were used as stratification standards to select regular districts. For Stage 2, eligible households and eligible household members were selected according to household distribution and age and sex of household head. A total of 9,048 households from those selected were surveyed, and 10,013 females over the age of 19 and under 64 from these households are being surveyed every year.

In order to analyze the living worlds of female groups, the Korean Longitudinal Survey of

Women and Families divides the environmental factors surrounding the individual female into three categories of work, family and everyday life. As such, the survey contains main sections on 'Women and Work', 'Women and Family' and 'Women, Everyday Life and Leisure' with sub-sections contained within each.

If we look at the survey contents per category, we can see that the first section consists of questions dealing with 'Women and Work' as a main category, and looks at changes in work according to life cycle, employment and career interruption, return to work, female-friendly work environments and such working conditions, various work-related social systems, and work-related values. The second section, 'Women and Family' looks at family type and structure change patterns, principles of family formation, changes in family relationships, care labor conditions (mainly care for the elderly and patients), perceptions and changes in attitudes towards family (family values, attitudes towards gender roles, sex awareness and such). The third category, 'Women, Everyday Life and Leisure' looks at main factors affecting women's quality of life away from labor, housework and care work factors; the state of women's leisure and changes and formation of social networking is looked at to measure social capital.

These three categories show changes in various ways and form, and restructuring for women throughout their life cycle from birth to old age. This study shows a woman's life cycle and how it is affected by marriage, childbirth and employment, and serves as a retrospective survey of women's events in the course of their lives.⁵ Also, ideology, values, physical factors and such (economic, demographic and cultural factors) have a mutual influence on each other and as such the internal connection of changes within the three domains and the world women live in.

2. Method of Analysis and Explanation of Variables

The aim of this study lies with examining factors relating to job change which arise from the longitudinal survey data. In order to do this, data from existing respondents from the 3rd longitudinal survey, and analysis was carried out using the basic descriptive statistics method. For job types, the respondents' job type at time of survey and it was checked whether there were any changes to this. If there was no change in jobs, then job characteristics were examined after division into waged workers, non-waged workers and special type workers. In the case of their being a job change, then characteristics were looked at in accordance to second or third job types. A division into waged workers, non-waged workers and special type workers was also made here to look at job characteristics. However, the majority of these variants are measured as category variables and as such the descriptive analysis method was used. A basic cross tabulation was used,

⁵ The retrospective data on periods of women's life cycle was data accurately collected from a specific point in time up until the longitudinal survey on respondent education experience, experience of moving accommodation, marriage experience, childbirth experience and job experience and such according to respondent age.

and in order to look at changes in job type correspondence analysis was used.

Correspondence analysis has many strengths for studying of category variables. The methodological characteristics of correspondence analysis can be divided into two types. First, correspondence analysis is a descriptive statistics method. Therefore, a detailed cause-and-effect relationship between the analyzed variables is not discussed and the method is useful for summarizing and organizing data. It can be said that the principle of this analysis method is similar to canonical correlation analysis, from the aspect of looking at different connections between a number of variables. Also, it has a similar aspect to multi-dimensional scaling analysis in that the relationship between variables can be shown in a map (Greenacre, 1984; Benezécri, 1992).

Secondly, correspondence analysis is different to other descriptive methods in that it deals with category variables or discrete variables. Of course, there are other analysis techniques which handle category variables such as the contingency table analysis or log-linear analysis, but correspondence analysis has several advantages over these methods. Firstly, while contingency table analysis simply looks at whether relationships exists between column and row categories, correspondence analysis enables analysis of relationships between detailed categories. In addition, it differs from log-linear analysis in that it has comparatively little influence from sample size and the interpreting of analysis results is relatively easy (Fox, 1984; Clogg and Eliason, 1987; Kim and Lee, 1999). Table 1 presents details of the variables used in the analysis.

Table 1. Characteristics of Analyzed Variables

Variable	Details
First job at time of last survey	Waged workers, sole business owners , unpaid family workers (18 hours and over), Unpaid family work (less than 18), special type workers
Second job at time of last survey	Waged workers, sole business owners, unpaid family workers (18 hours and over), Unpaid family workers (less than 18 hours), special type workers
Present job	Waged workers, sole business owners, unpaid family workers (18 hours and over), Unpaid family workers (less than 18 hours), special type workers
Continuance of first job or not	

Variable	Details
Characteristics of current (waged workers)	Regular workers/irregular workers, full-time/part-time workers
Intention to change jobs (waged workers, non-waged workers, special type workers)	Ownership of house or not (standard variable: house ownership)
Reason for changing jobs (non-waged workers, special type workers)	Employed, non-employed (standard variable: employed)
Job problems (non-waged workers, special type workers)	Employed, non-employed (standard variable: employed)

IV. Results of Analysis

1. Overall Change in Jobs

Table 2 shows data related to job continuance. Among the respondents who had a job, 79.3% had the same job at the time of the survey. Conversely, 20.7% of respondents had a change in job.

Table 3 shows continuance in second jobs. Considering the 5-year gap in between surveys, as can be expected a relatively small number of respondents could be surveyed on the second job. A total of 53 respondents were surveyed and almost half had kept their second jobs, while the other half showed changes in their second job.

Table 2. Confirmation of Job Continuity from Last Survey (First Job)

	Waged workers	Business owners, freelancers, restaurant workers etc.	Paid family workers (18 hours or more per week)	Paid family workers (Less than 18 hours per week)	Special type workers*	Total
Don't know/ no response	1 0.1%	0 0.0%	0 0.0%	1 1.5%	0 .0	2 0.1%
Yes	1216 69.5%	839 84.8%	816 92.8%	59 86.8%	81 76.4%	3011 79.3%
No	533 30.5%	156 15.7%	63 7.2%	8 11.8%	25 23.6%	785 20.7%
Total	1750 100%	995 100%	879 100%	68 100%	106 100%	3,798 100%

* Insurance sellers, concrete truck and truck drivers, home-study teachers etc.

Table 3. Confirmation of Job Continuity from Last Survey (Second Job)

	Waged workers	Business owners, freelancers, restaurant workers etc.	Paid family workers (18 hours or more per week)	Paid family workers (Less than 18 hours per week)	Special type workers*	Total
Yes	17 44.7%	3 37.5%	1 100%	1 100%	3 60.0%	25 47.2%
No	21 55.3%	5 62.5%	0 0.0%	0 0.0%	2 40.0%	28 52.8%
Total	38 100.0%	8 100.0%	1 100.0%	1 100.0%	5 100.0%	53 100.0%

* Insurance sellers, concrete truck and truck drivers, home-study teachers etc.

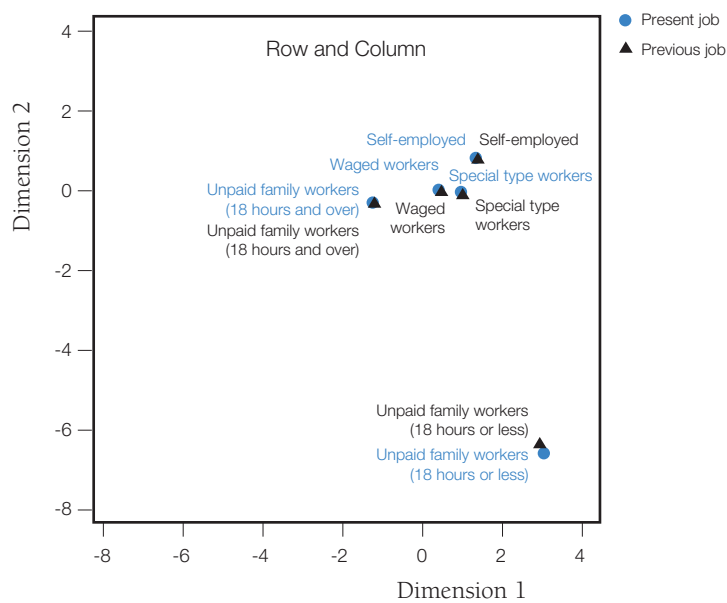
As the data shows, with the previous job as a basis, little change in jobs could be seen during that period of time. Details of job change over a longer period of time can be seen in Table 4 and Diagram 1. Table 4 is a comparison of one’s first job and present job. As aforementioned, no major differences could be seen between the first and second jobs. 94.6% of the total 3,798 respondents showed no job changes. Diagram 1 shows this through a correspondence analysis. The individual categories of the present and previous job have almost the same arrangement. In terms of job type, a noticeable job category would be those working non-paid family work for 18 hours or less per week.

Table 4. Comparison of Present and Previous Job

	Waged workers	Business owners, freelancers, restaurant workers etc.	Paid family workers (18 hours or more per week)	Paid family workers (Less than 18 hours per week)	Special type workers*	Total
Waged workers	1434	48	56	4	9	1551
Business owners, freelancers, restaurant workers etc.	22	847	7	2	3	881
Paid family workers (18 hours or more per week)	7	7	785	0	0	799
Paid family workers (Less than 18 hours per week)	1	0	0	58	1	60
Special type workers*	12	4	0	0	81	97
Total	1476	906	848	64	94	3,388

* Insurance sellers, concrete truck and truck drivers, home-study teachers etc.

Diagram 1. Correspondence Analysis for Present and Previous Job



2. Job Characteristics by Category

A. Waged workers

While the analysis which has been discussed until this point shows the overall changes in women’s jobs, this section now attempts to show the characteristics of individual job categories. Although indirect, this enables a look at the factors which influence job change. Table 5 shows the characteristics of waged workers’ jobs in accordance to those who have continued working in the same job and those who have changed jobs. The job characteristics are divided in accordance to whether the workers are regular and whether they are full-time. For the group who have kept their jobs, there are more who are regular workers. In particular there were 1.5 times more respondents in the regular workers/full-time group than those who had changed their jobs. The respondents who had experienced a change of job were mainly irregular workers. For irregular/full-time workers, the proportion of those who had experienced job change accounted for 10.5% more than those who had not. Also, for irregular/part-time workers, there were 7.6% more of those who had experienced job change than those who had not. This shows the connection between job changes of waged workers and employment instability.

Table 5. Characteristics of Waged Workers' Jobs

	Continuous	Job Change
Regular workers/full-time	662 54.7%	195 36.8%
Regular workers/part-time	26 2.1%	10 1.9%
Irregular workers/full-time	348 28.7%	208 39.2%
Irregular workers/part-time	175 14.5%	117 22.1%
No response	5 0.4%	3 0.5%
Total	1,211 100.0%	530 100.0%

B. Non-waged workers

Due to the fact it was not possible to conduct an individual analysis of non-waged workers' characteristics, job change and related characteristics were looked at instead⁶ . Table 6 shows the intention to change jobs among sole business owner and special type worker respondents who had not changed jobs. 95.1% of sole business owners expressed an intention to stay in the same job, while 92.3% of special type workers responded likewise.

Table 6. Non-waged workers' Intention to Change Jobs (continuous)

	Business owners, freelancers, restaurant workers etc.	Special type workers
Intention to continue working in job	77 95.1%	774 92.3%
No intention to continue working in job	4 4.9%	65 7.7%
Total	81 100.0%	839 100.0%

6 Analysis on special-type workers could not be carried out due to insufficient responses

The problems facing job changers were also looked at. Diagram 2 shows the mean value of problems experienced by sole business owners. For sole business owners who had changed jobs the biggest problems were costs and business funds. Other factors such as managing housework at the same time, future prospects and rewards of the job showed relatively low levels of difficulty for these workers.⁷

Diagram 2. Problems of Sole Business Owners (Job Changers)

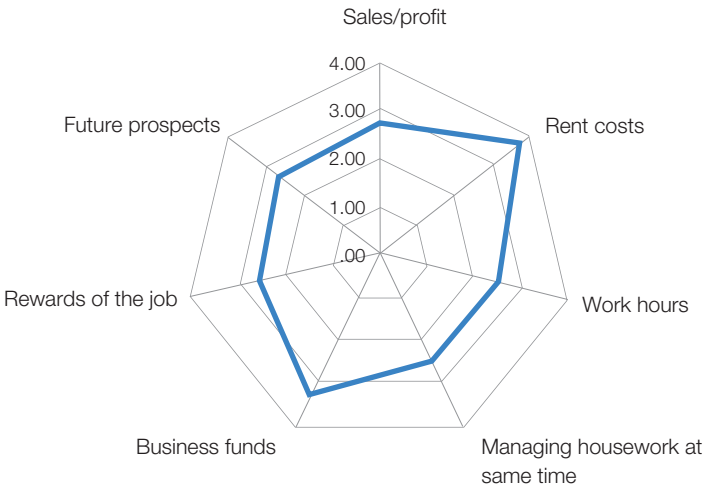
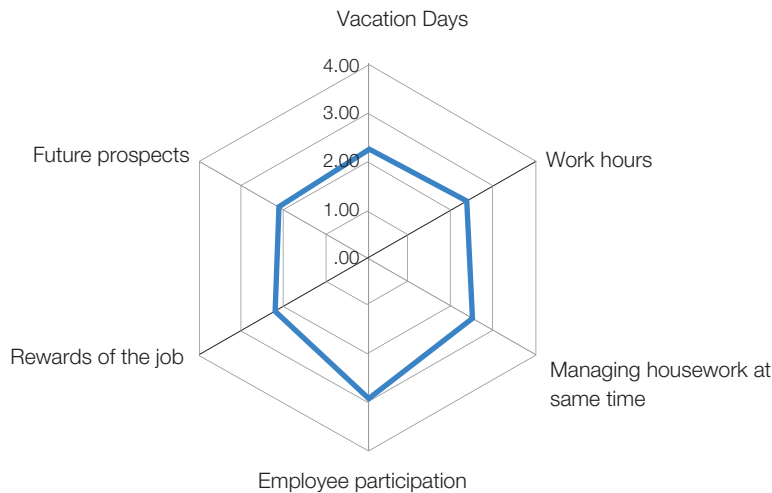


Diagram 3 shows results of a comparison of levels of problems unpaid family workers in the larger category of non-paid workers face. The biggest problem faced by unpaid family workers who had changed jobs was employee participation. Although these workers participated in actual work duties, they tended to be excluded from the decision-making process and as such experienced bigger problems in future prospects, sense of reward for the job, working hours, managing housework and such categories.

7 Further analysis is needed in order to confirm the results.

Diagram 3. Problems of Unpaid Family Workers (Job Changers)



C. Characteristics of Job Change and Type: Job Changers

This section aims to look at what types of job changes there were, and what factors these changes were related to. Table 7 shows the details of the jobs chosen by respondents who had changed jobs. Among a total of 454 respondents, approximately 55.1% chose the same type of job, while the remaining 45% chose a different type of job.

Due to the fact that unpaid family workers and special type workers showed low absolute frequencies, no specific patterns could be found. However, on the other hand waged workers and sole business owners showed noticeable patterns. 7.4% of waged workers changed their job to that of a sole business owner, 4.4% to special type workers and 3.3% to unpaid family workers.

Table 7. First and New Job Cross Tabulation

New Job	First Job						Total
	Waged workers	Business owners, freelancers, restaurant workers etc.	Unpaid family workers (18 hours or more per week)	Unpaid family workers (Less than 18 hours per week)	Special type workers*		
Waged workers	229 84.5%	62 67.4%	57 80.3%	3 60.0%	11 73.3%		362 79.7%

	First Job						
		Waged workers	Business owners, freelancers, restaurant workers etc.	Unpaid family workers (18 hours or more per week)	Unpaid family workers (Less than 18 hours per week)	Special type workers*	Total
New workers	Business owners, freelancers, restaurant workers etc.	20 7.4%	16 17.4%	10 14.1%	2 40.0%	3 20.0%	51 11.2%
	Unpaid family workers (18 hours or more per week)	9 3.3%	10 10.9%	4 5.6%	0 .0%	0 .0%	23 5.1%
Jobs	Unpaid family workers (Less than 18 hours per week)	1 .4%	1 1.1%	0 .0%	0 .0%	0 .0%	2.4%
	Special type workers*	12 4.4%	3 3.3%	0 .0%	0 .0%	1 6.7%	16 3.5%
	Total	271 100.0%	92 100.0%	71 100.0%	5 100.0%	15 100.0%	454 100.0%

Diagram 4 shows these results in a two-dimensional diagram. First jobs are represented by a triangle and new jobs by a circle. The worker type with the closest distance between the first and new job are waged workers. This is followed by self-employed and special workers. Conversely, those with the furthest distance were unpaid family workers. There is a high possibility of waged workers remaining as waged workers after a job change, while unpaid family workers have a high possibility of changing to a different job type.

So what factors are these changes related to? In order to find the answer to this question, a multiple correspondence analysis was carried out on socio-economic factors such as respondents' ages, levels of education and job type changes. Diagram 5 shows the results of a multiple correspondence analysis. The overall results show respondents' job changes segmented by age and educational attainment.

Those in their 20s and 30s educated at college level or above showed a high tendency waged worker-waged worker shifts. Those in their 40s who had graduated from high school went from being special type workers to either self-employed, special type workers or unpaid family workers. Those in their 50s and 60s with middle school level education or lower showed a high tendency to go from being self-employed or unpaid family workers to new jobs as unpaid family workers. Respondents with no significant job changes and those with changes showed clear segmentation in age and educational attainment.

Diagram 4. Correspondence Analysis for First and New Job

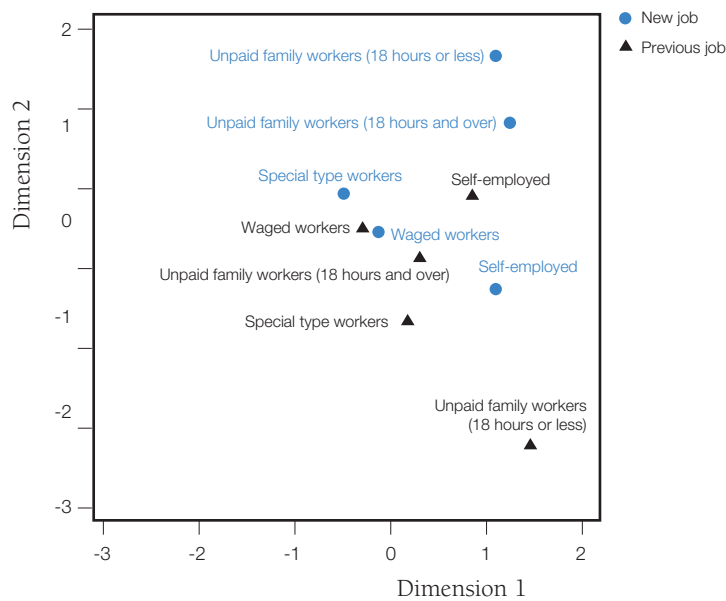
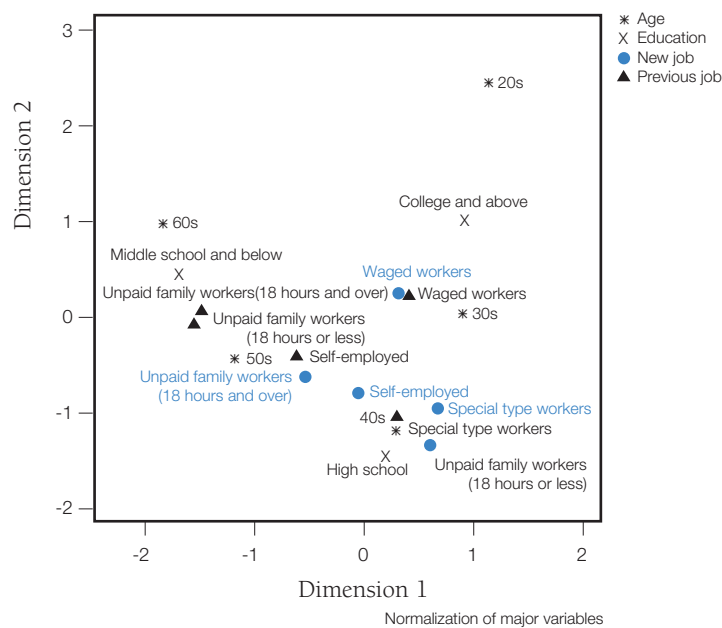


Diagram 5. Multiple correspondence analysis for Respondent Characteristics of First and New Job



V. Summary and Discussion

This study used data from the Korean Longitudinal Survey of Women and Families to look at characteristics of female job change. Due to the fact the survey could be carried out at intervals of up to four years, it provides an insufficient time period to show such aspects. However, this data is worthy of analysis in that it includes the various types of job change process.

The data analysis was based on the job at the time of the last survey, and was conducted in the way of looking at overall and specific aspects of changes. Overall aspects showed no significant changes in jobs. At the very least, there were no significant changes in terms of job type. Of course, this does not mean the respondents did not change their jobs or work, but simply that there were no big changes in whether they were waged workers or sole business owners, unpaid family workers or special type workers. Therefore, it can be said that significant segmentation does exist within individual job type categories.

For specific aspects, the characteristics of respondents with job changes were divided into job type, age and educational attainment sections. First of all, for waged workers a high possibility of job change could be seen for workers who were irregular and part-time workers. For regular part-time workers the possibility is 1.5-fold higher.

As for the biggest reasons for non-waged workers' job changes, for sole business owners it was due to operational difficulties and for unpaid family workers the reason was participation in business operations. A noticeable connection can be seen between age and educational attainment and such job changes. Those in their 20s and 30s with college-level education tended to make shifts from waged worker to waged worker. Conversely, those in their 40s with high school-level education shifts were made from self-employment to special type worker jobs and females in their 50s and 60s with middle-school level of education or below made shifts to unpaid family worker job types.

Such analysis results showed similar results to prior research regarding career interruption according to age, and the jobs of females in their 40s and above showed characteristics of being low-skilled, low-waged simple jobs (Seong-jeong Park, 2005; Soo-kyeong Hwang, 2003; Eunjin Oh et al, 2008). While the results are not based on long-term data on job changes, they shows that job changes arise in accordance to a woman's life cycle. If we were to suppose the ranking of jobs followed the order of waged workers-sole business owners-unpaid family workers, then a decline of job types can be seen.

To conclude, several implications have been presented regarding to segmentation in age and education of the female labor market in relation to status.⁸ Firstly, the status problem in the

⁸ Such characteristics of female workers are even more noticeable when compared to male workers.

female labor market needs to be segmented according to job type. For waged workers the issue of employment stability is the most relevant factor. As such, the employment stability of all waged workers could be thought about in the same context. Conversely, the most important factor for sole business owners is financial matters. The jobs of sole business owners have the biggest tendency to change to unpaid family workers. Therefore, for sole business owners the maintenance of a business is as important as establishment.

Secondly, in relation to female employment policy, the role of self-employment is important. When considering the distance with other job type categories, the sole business owners play an important central role. On the other hand, compared to sole business owners, waged workers or special type workers have relatively high isolation. Consequently, self-employment needs to be considered an important factor in female employment policy.

Third, other factors which need to be considered alongside female employment policy are the age and educational attainment of women. Job changes could be noticed according to certain ages or age groups. It could be more realistic to focus policy on paid work jobs for women in their 20s and 30s and on self-employed jobs for those in their 40s and above (Seo-yeong Jang et al, 2009). Therefore, segmentation of employment policy which caters to these characteristics is needed.

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