A STUDY ON WOMEN'S CAREER INTERRUPTION IN KOREA: A META-ANALYSIS

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Abstract - The purpose of this study is to extract the core keywords from the articles of women with career interruption inKorea through meta-analysis and to visualizetheir association. The collected data were structured based on Big data(106sets) from 1997 to 2017 and analyzed using Nvivo and R programming. In the process, 80 words were devised, and text mining and social network analysis were conducted. As a result, it is divided into two groups, and the reference point is the timing of enactment(2008). In addition, the overall analysis results are as follows. First, terms such as care, child, and develop were the main keywords in the before-groups, while terms such as care, work, and employ were the main keywords in the after-group. Second, network patterns are similar to after-group patterns compared to before-group. Therefore, support for women with career interruption suggests that not only parenting policies but also employment policies should be implemented in parallel.

Keywords - Big data, Meta-analysis, Social network analysis, Text mining, Women's career interruption.

I. INTRODUCTION

In Korea, 'career-interrupted women' isa term created by the government policies to increase female employment [1].It is defined as follows by the Act on the Promotion of Economic Activity of Career Interrupted woman Established in 2008. A career interrupted woman refers to a woman who wants to work among women who have stopped economic activities or have never done economic activities because of pregnancy, childbirth, childcare and care of family. This concept strongly implies that women are constrained in participating in the labor market due to inevitable circumstances such as childcare and housework duties rather than voluntary resignation from their jobs [2]. Therefore, the enactment of this law is a major turning point that calls for women's deviation from the labor market to be associated with gender stereotypes and roles in society, and emphasizes public support for them. In other words, it can be said that the state recognizes woman's career interruption as a social problem, not a simple choice of the individual, and provides a comprehensive prescription for it[3].

In this context, studies on women with career interruption in Korea have been conducted steadily. Whereas early studies on women with career interruption were conducted in the late 1990s [4], the number of related studies has increased significantly since the enactment of the 2008 Act. However, most of these studies have been conducted under the name of career interruption, focusing on the life events of married women, without taking into account the socialstructural context in which female labor is not recognized as a career [5]. In addition,these studies do not adequately demonstrate the validity of bringing up at the phenomenological issues regarding career interrupted women. This is because these studies tend to focus only some superficial cases that result from simple communication without understanding the authenticity of complaints from women whose careers have been interrupted [6]. Therefore, it is necessary to consider researcheson the context of women employment, as well as researches on career interruption focused on life events, by looking at the trends of studies dealing with career interrupted women.

Therefore, we will explore the context of female employment around career interruption women by tracking the academic papers related to the career interrupted women and analyzing the related vocabularies and terms based on keywords.

II. METHOD

2.1. Materials

In this study, we collected the researches on the subject of 'career interrupted women' and extracted the keywords that these studied contain. The extracted keywords were visualized through data mining and analyzedthrough social networking techniques. The data collection for this study makes full use of the search site called RISS4U, which is known as a data search space for Korean researchers. First, research papers were only searched with the keyword 'career interrupted women' and 106 papers were categorized based on the Act on the Promotion of Economic Activity for career interrupted women', which was enacted in 2008.

Years	articles	Keywords
1997-2007	6	59
2008-2017	100	80
Total	106	80

Table1: Collected articles

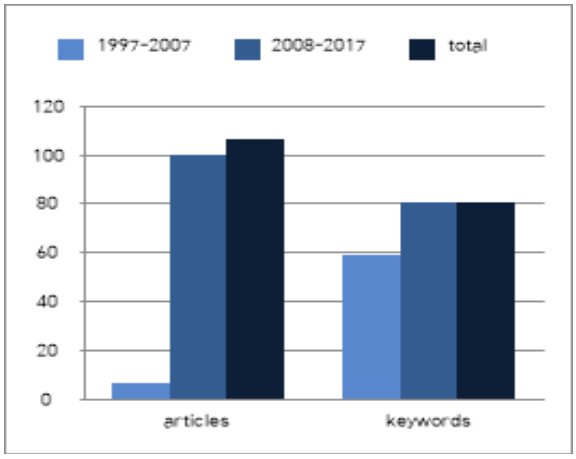

Fig.1. collected articles

The data used in this analysis are excerpts from domestic research data based on reports and papers related to women with career interruption. The data were classified into two types of data: before-statute articles and after-statute articles. The criterion is 2008, which is based on a total of 106 data (see Table 1, Fig. 1).

As shown in <Fig. 1>, it can be noted that the number of articles after-statute has increased overwhelmingly, and at the same time, the number of keywords has greatly increased.

2.2. Procedure

In the analysis process, the data mining technique, which is one of the big data analysis methods, was applied based on the abstract of the final list. In addition, data visualization techniques were applied to analyze trends of the above keywords. In addition, the concepts included in the keyword analysis results were compared in parallel by frequency analysis. And, we have structured the association of concepts derived through social networking technique, one of the phenomenological analysis methods[7].

2.3. Tools

Data visualization tools are widely available from various versions of open source to commercial software, so they can be used in various ways to suit the user's level. However, most of the tool kits are judged to be appropriate in determining the objective analysis results. Therefore, Nvivo 11.0 pro used in this analysis is a commercial software of a world-class level and it is considered to be a suitable analysis tool because it is evaluated to be more valid than the open software.

2.4. Preliminary study results

In addition, R-programming was used for social network analysis. Table 2 lists the word dictionary constructed through preliminary studies. All words consisted of 80 pieces, was extracted from the entire paper.

activity	condition	effective	Government
adaptability	counseling	efficacy	Help
adviser	crisis	employ	Hierarchical
awareness	decision	entry	household
balance	desire	experience	human
barriers	develop	family	identity
break	difference	force	income
care	discontinuity	future	individual
change	economic	Gap	industry
child	education	Gender	influence
information	negative	Profession	service
job	network	Program	social
labor	occupation	Provide	status
learning	organization	Psychological	structure
life	participation	Relationship	support
management	perception	Return	system
market	policy	Role	training
marriage	positive	Satisfaction	vocation
model	preparation	Seek	wage
need	process	Self	work

Table2: Word dictionary

III. RESULTS

3.1. Keyword(frequency) analysis results

As a result of comparing the top 10 keywords, words such as care, develop, change, and child were strong in the before-group, and words such as care, employ, work, and job were strong in the after-group(See Fig. 2, 3). Actually, the top 20 entries in the before group are care, develop, change, child, employ, work, education, job, labor, marriage, need, self, condition, counseling, difference, economic, family, gender, human, industry.

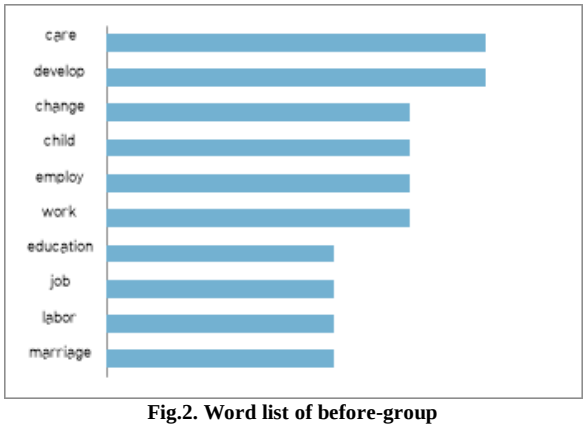

Fig.2. Word list of before-group

And, the top 20 entries in the after group are care, employ, work, job, education, support, experience, labor, market, child, develop, family, marriage, need, self, program, social, training, life, influence.

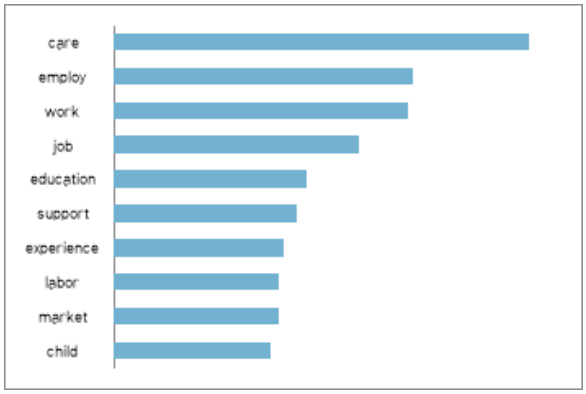

Fig.3. Word list of after-group

3.2. Keyword(word cloud) analysis results

In this process, the visualization techniques were used to derive the keywords from the two periods, and the results are shown in Fig. 4 and 5.



Fig.4. Wordcloud of before-group



Fig.5. Wordcloud of after-group

Overall, the wordcloud results can clearly identify the quantitative aspects of the concept by schematizing the frequency of occurrence words.

3.3. Social network analysis results

In this process, we analyzed 20 words derived from the two groups using the association rule function. Here, the word in the overall central position means that the frequency is high. And the thickness of the line segment means the strength of the connection.In addition, the size of the letters is irrelevant. The smaller the size of the circle while leaving the center, the lower the frequency and the lower the relevance.

As a result of the social network analysis, the parenting perspective is relatively more strong in the articles before the legislation time than after the legislation time. However, it is confirmed that the employment perspective is associated to the articles not only before the legislation time but also after the legislation time.

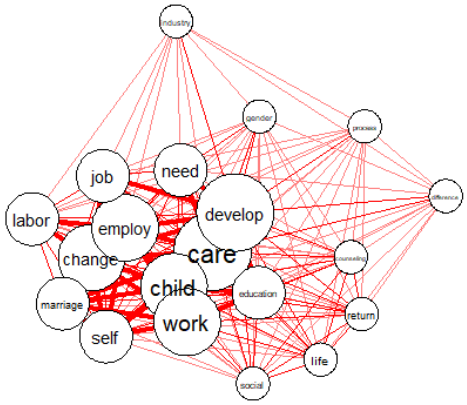

Fig.6. SNA of before-group

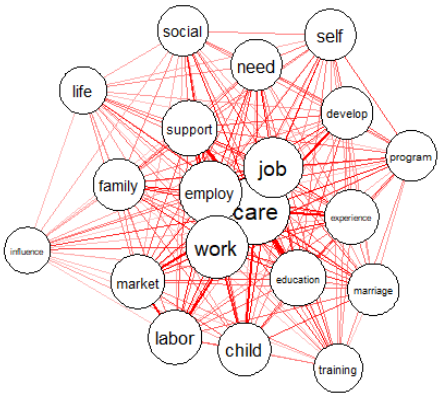

Fig.7. SNA of before-group

As a result of the keyword analysis, it can be interpreted that the women with career interruption are understood from the parenting perspective frame. But, through analysis of the social network analysis, it was found that the employment perspective was related.

DISCUSSION

The discussion of this study are as follows. First, in this study, it was found that support policy for women with career interruption was parenting support policy. Second, it is found that the other support policy for women with career interruption is employment support policy [8]. So far, the policy of this part has

been relatively insufficient, so a more practical system should be reorganized. The implications for the policy support of women with career interruption are as follows.

First, it is important that governments, corporations, and the people have a strong will to resolve each other's problems and understand common goals.

Second, in order to implement more comprehensive employment policies and work-family reconciliation policies, it is necessary to provide capacity cultivation so that individuals are not isolated from society[9]. In addition, through the promotion of public / private investment in human capital, more focus should be placed on allowing individuals to perform their roles adequately as members of society.

Third, it is necessary to enhance the willingness of the corporation to act actively through the enhancement of family-friendly awareness and enhance the effectiveness of the government policy based on consensus and cooperation among the labor and management [10].

Fourth, from an educational point of view, gender equality career education and continuous career development education should be strengthened [11]. Finally, this study used just six cases of pre - statute articles of career disruptive women for analysis. This is because there is a limit to the analysis, so it is necessary to present a more detailed structure.

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