



# Gender Issues in International Development Co-operation (ODA) Projects: Analysis of Major Research Trends

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**Abstract-** Recently, in the Official Development Assistance(ODA)project, so-called cross-cutting issues such as gender and environmental issues are emerging as important concerns. This study focused on analysing the central research topics of ODA projects relating to gender. For this purpose, academic papers on gender-related ODA projects were analysed using the text-mining method. We compared papers published in Korean journals with those published in foreign journals, identified the differences, and, further, sought to draw out the implications for establishing the direction of gender ODA policy in Korea. In the case of Korea, there is insufficient experience in promoting gender-related ODA projects, but it has been found that major foreign donors have performed projects in this field for a long time. Therefore, from the standpoint of Korea it is necessary in the future for Korean gender-related ODA projects to be carried out mainly in programmes, and at the same time they must be undertaken in conjunction with programmes to combat disease, health problems and education problems in the recipient countries..

**Keywords:** gender-related ODA projects, gender and ODA, text mining analysis, topic analysis

## I. INTRODUCTION

While various efforts are being made to improve the quality of life of residents in developing countries through the ODA project, gender issues are increasing in importance today. Gender issues may be said to be the most important factor in gender equality, but this is an area in which it is difficult to achieve rapid improvements despite long-term efforts. In particular, many point out that the Coronavirus pandemic, which has been spreading worldwide from the beginning of 2020, is intensifying the gender problem in developing countries. There are many reports that problems such as domestic violence and sexual violence are becoming more severe owing to the increasing number of women who have to stay at home because of transport restrictions.

In particular, women in developing countries, including Africa, have fewer job opportunities owing to their low social and economic status, and it is no exaggeration to say that they are discriminated against in almost all fields, including access to public services such as education, health and technical education, and participation in political activities. Gender equality and women's empowerment in all areas of society have long been highlighted as a key agenda of development co-operation, as representing the most effective means to achieve poverty eradication and sustainable development. In particular, in recent years the gender issue has become an important part of the agenda in aid policy, owing to the demand to strengthen the activities of various international organizations and to strengthen women's capacities in each individual donor country. In the process of implementing the ODA project in detail, in order for the gender issue to be reflected in a practical way it is necessary first to identify the detailed core issues surrounding it.

In order to address these problems, various efforts have been made in the academic world to identify gender issues, but most of them have been limited to the level of content analysis of academic papers. Against this background, this study aims to compare Korea with foreign countries in terms of its treatment of gender issues, using text mining analysis. To achieve this, we will, first, identify what major gender issues have recently been dealt with in ODA policies in Korea and abroad. Secondly, by comparing these, we will gain the information needed for establishing and implementing gender-related ODA policies in Korea in the future. .

## II. REVIEW OF PREVIOUS STUDIES

The gender issue in aid policy has been difficult to reflect in aid policy, since the cultural characteristics of the countries receiving aid have as a result been accentuated (Adil et al., 2013; Alesina and Weder, 1999). Discussion around mainstreaming gender sensitivity in aid stems from the fact that in 2001, only 1.4 per cent of donor countries' total subsidies were invested in women or gender concerns (Durberry et al.,

2008). Although international development assistance has focused on activities to reduce poverty in less developed countries, it has repeatedly been pointed out that poverty has not been alleviated in less developed countries through aid, and furthermore that poverty among women has worsened (Burnside and Dollar, 1998; Boone, 1996; Mishra and Newhouse, 2009). Recognizing that the absence of a gender perspective in less-developed countries amplifies the gender gap and hinders the development of the country, we can be clear that there is a discussion to be had in recognizing, and upholding the importance of, a gender perspective in these countries.

Discussion focused on taking gender issues into account in development took place in 1997 with the introduction of the Gender Marker system at the OECD Development Assistance Committee (DAC). The Gender Marker system is a system designed to show the contribution of donor countries to gender equality by measuring whether the DAC member countries' aid projects had women as their beneficiaries, and to serve as a monitoring function between the member countries. The Gender Marker has evaluated all the projects carried out by all donor countries individually since the UN made gender issues a cross-cutting issue, in order to increase aid effectiveness in 2012 to determine whether these projects are related to gender equality projects. It is being used as a vital tool. The concept of gender equality can vary according to the standards and cultural characteristics of each country. In addition, there are various problems or limitations associated with the measurement method used by each indicator.

Recognizing these limitations, domestic and foreign studies (Jang, 2019; Rankin, 2014; Xuan, 2019; Asiedu, 2002; Delahais&Toulemonde, 2012; Hussain, 2013; ITAD, 2012; Choi & Kim, 2019) have used various approaches in dealing with gender issues. However, what is critical now, since the Gender Marker system has been introduced and used internationally, is that projects aimed at solving the gender problem should be specifically reflected in the ODA policymaking process. In other words, in order to solve the gender problem ODA projects must be specifically discovered and executed (Center for Global Development, 2018).. In order to continuously uncover newly arising gender issues and connect future gender policies to aid policies, it is necessary to comprehensively review existing gender issues. From this point of view, it is meaningful to compare and analyse ODA studies conducted in domestic and international academia from a gender perspective, so as thereby to derive important research topics.

### III. SURVEY DESIGN

This study analyses and compares ODA- and gender-related papers published in Korean and in foreign academic circles. The publication period for analysis is limited to 1 January 2010 to 31 December 2020. In terms of the Korean papers subject to analysis we targeted KCI papers in Korea, and in terms of foreign papers we targeted 145 social science journals managed by Springer Publishing. In order to extract academic papers, we selected those with titles containing both 'ODA' and 'gender' as keywords. After we had extracted the papers, it was decided to derive the Korean and foreign core subject groups and compare these. After describing this process, we will present the direction for future gender ODA policy in Korea. For this analysis the text mining method was used, and the Netminer 4.4 program was used as software.

### IV. ANALYSIS RESULT

#### *4.1 Gender ODA in Korea*

##### *4.1.1 General features*

The total number of papers containing the keywords 'gender' and 'ODA' was 542. The total number of words included was 4,801. Of these, the word that occurred most frequently was 'ODA', which appeared 1,188 times. There is a need to tune the data set gathering these words for the purpose of the study. Cloud analysis makes it possible to represent in visual form the keywords occurring in the papers relating to gender and ODA. The results of performing cloud analysis after tuning are shown in Figure 1.



Figure 1 Cloud analysis of Korean papers

4.1.2 Topic group derivation

Some words were excluded after tuning for all words. This left 4,750 words, and topic analysis was conducted on these. As a result of this topic analysis, five subject groups were formed, each topic being made up of seven words. Figure 2 shows the five topic groups. Thirty-one words were applied to extract the five topics.

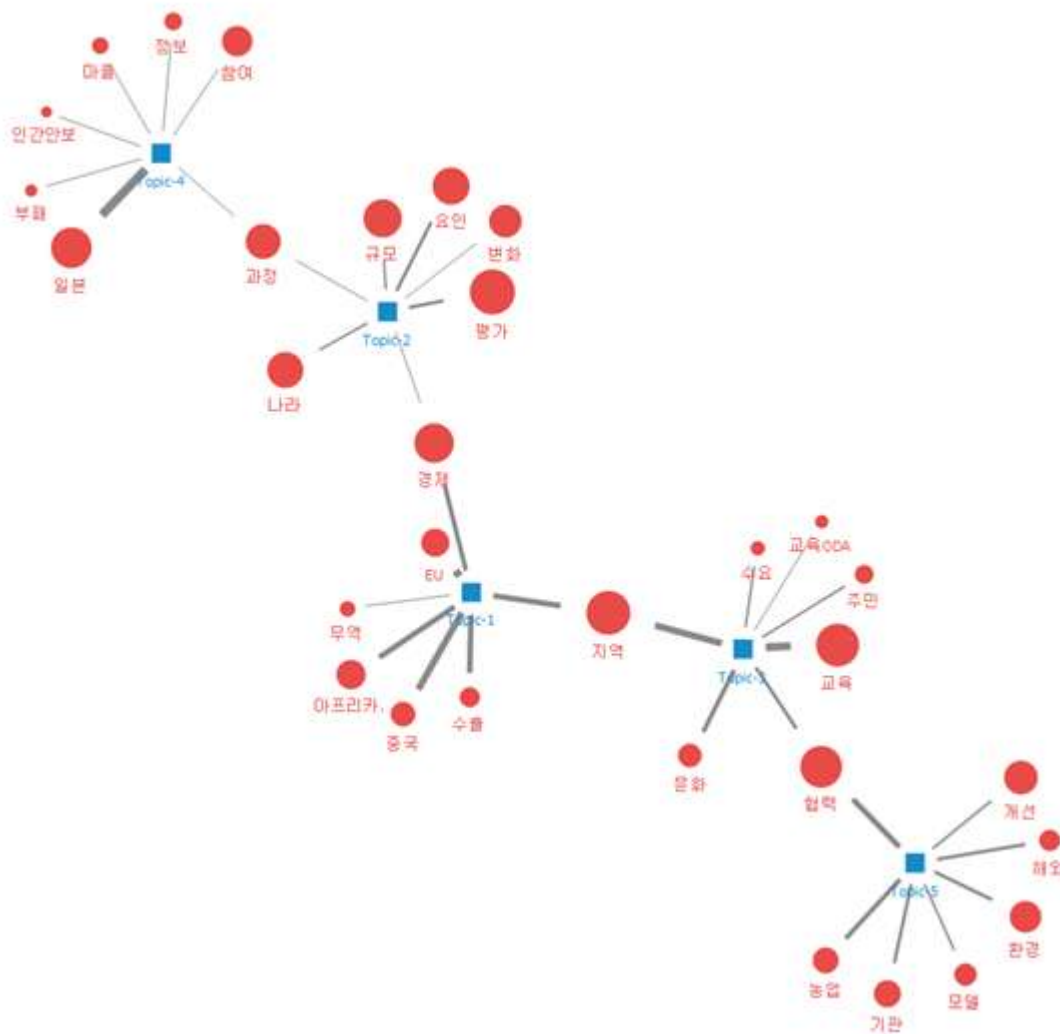


Figure 2 The five thematic groups derived

As Figure 2 indicates, Topic 1 is made up of seven words: *region, economy, EU, trade, Africa, China and export*. This topic implies that gender-related ODA projects might be related to exports to Africa. Topic 2 consists of *evaluation, country, change, factors, scale, process and economy*. This may be said to be a subject group related to the evaluation of gender-related ODA projects. Topic 3 consists of *region, education, culture, residents, education ODA, demand and cooperation*. This may be said to be a group of topics relating to education ODA. Topic 4 consists of *process, participation, Japan, information, village, human security and corruption*. This topic suggests that gender-related ODA projects may be businesses that can prevent corruption. Topic 5 consists of *cooperation, improvement, overseas, environment, models, institutions and agriculture*, which implies that gender-related ODA projects are closely related to the agricultural sector.

#### 4.1.3 Analysis of concentric circles and centrality

Via concentric circle analysis, it is possible to grasp the positions of words that play a key role in a text. As a result of the concentric circle analysis shown below (Figure 3), the positions of the keywords can be confirmed.

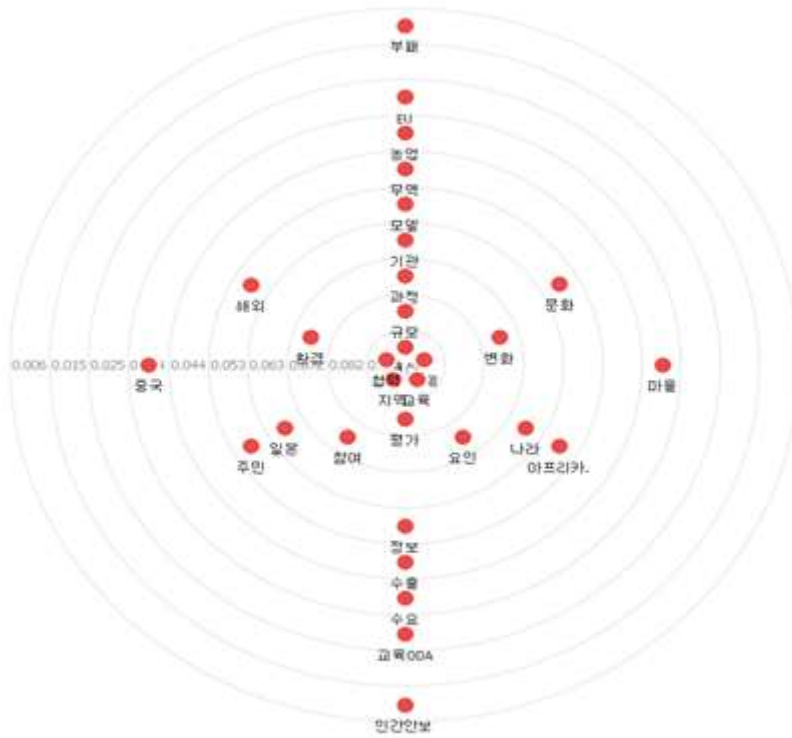


Figure 3 Analysis of concentric circles in Korean networks

The keywords are listed in order of introverted connection-centredness (in-degree centrality), as shown in Table 1.

Table 1 In-degree centrality score

		1	2
		Degree Centralit	Degree Centra
1	협력	0.100644	0.100644
2	지역	0.099133	0.099133
3	개선	0.093928	0.093928
4	경제	0.093696	0.093696
5	교육	0.091965	0.091965
6	규모	0.089972	0.089972
7	평가	0.084294	0.084294
8	환경	0.081536	0.081536
9	과정	0.079010	0.079010
10	참여	0.077249	0.077249
11	변화	0.076146	0.076146
12	요인	0.075534	0.075534
13	나라	0.068747	0.068747
14	기관	0.067055	0.067055
15	일본	0.062637	0.062637
16	해외	0.060784	0.060784
17	문화	0.059661	0.059661
18	모델	0.058756	0.058756
19	정보	0.057209	0.057209
20	주민	0.055976	0.055976
21	아프리카	0.055243	0.055243
22	수출	0.045971	0.045971
23	무역	0.045658	0.045658
24	수요	0.041156	0.041156
25	마을	0.041102	0.041102
26	농업	0.040115	0.040115
27	중국	0.036145	0.036145
28	EU	0.029681	0.029681
29	교육ODA	0.027504	0.027504
30	인간안보	0.008386	0.008386
31	부패	0.005592	0.005592

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A connection-oriented network made up of 31 words is shown in Figure 4.

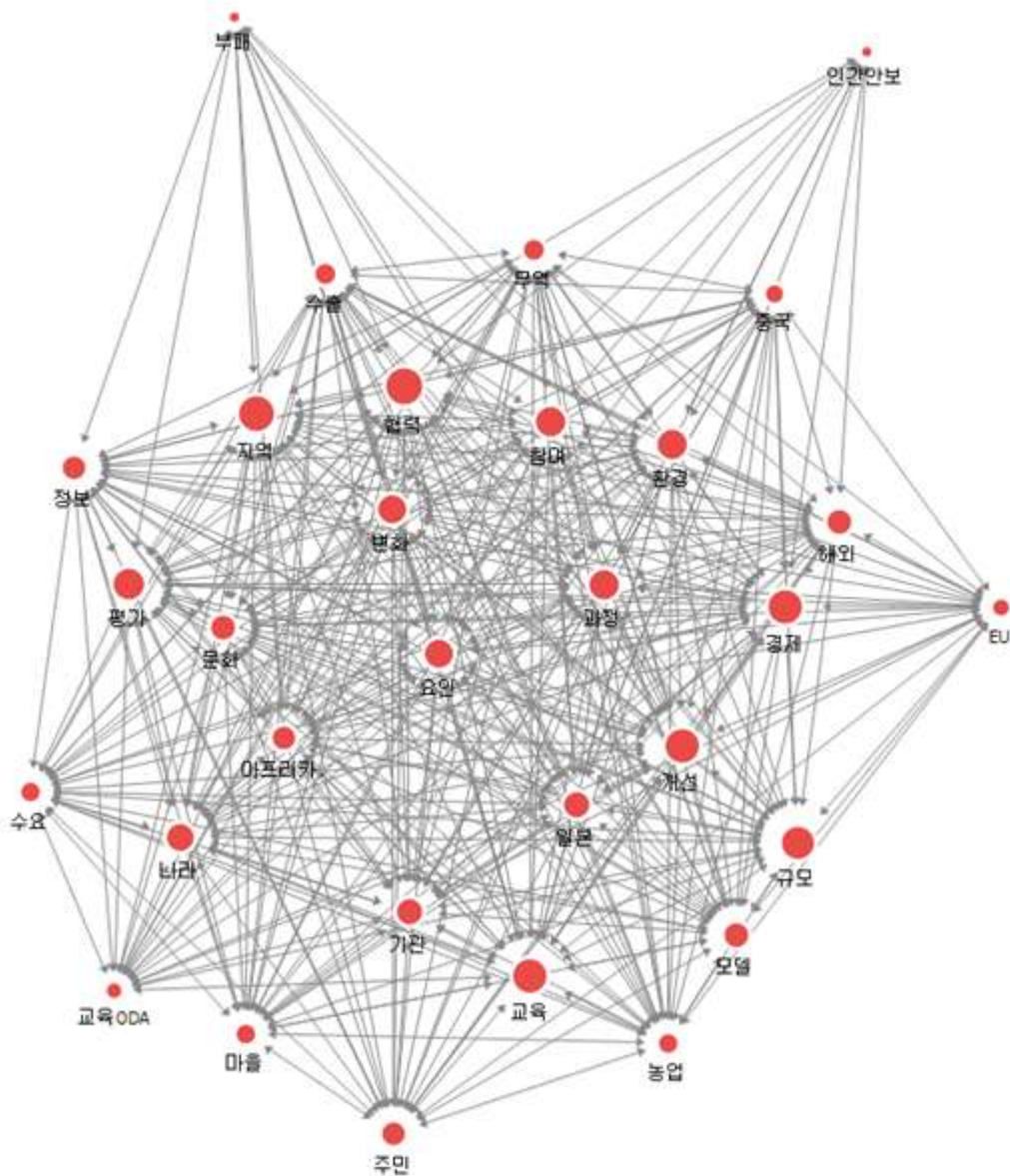


Figure 4 Connection-centric network

Since Figure 4 is so complex, it may be simplified using the PFnet function, as shown in Figure 5. As a result this network is abbreviated, leaving only 6 per cent of all links.

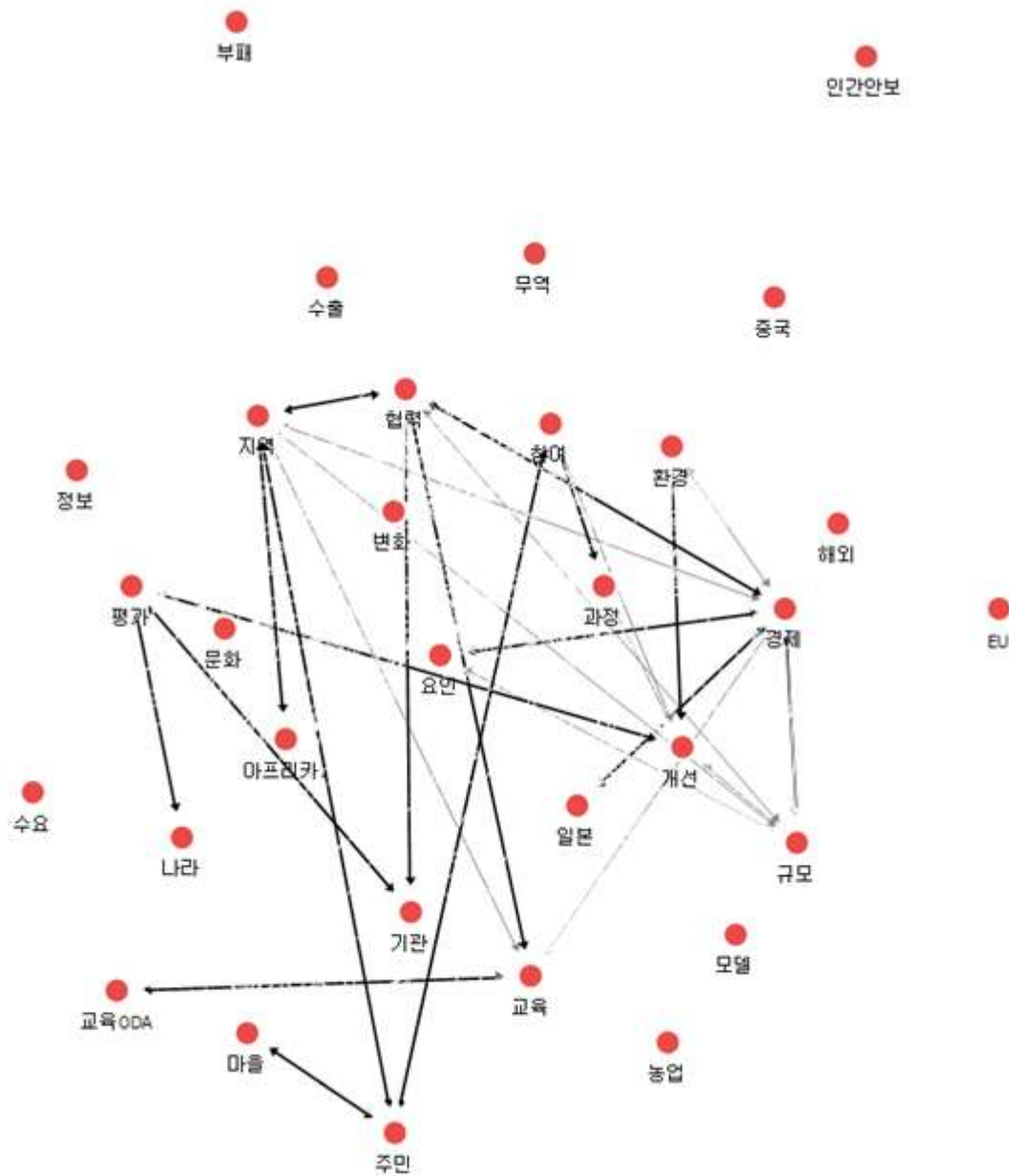


Figure 5 Abbreviated network by PFnet analysis (domestic literature)

## 4.2 Gender ODA in other countries

### 4.2.1 General features

The number of papers containing the words 'gender' and 'ODA' appeared to be numerous, so this was inevitably limited, to 1,000. For analytical convenience, the number of words included in the 1,000 papers selected, based on the most recent year, is 12,450. Of these words, the word that occurred with the greatest frequency was 'ODA', which it was found appeared 1,188 times in total. There was a need to tune the data set gathering these words for the purpose of the study. The result of performing cloud analysis after this tuning is shown in Figure 6.





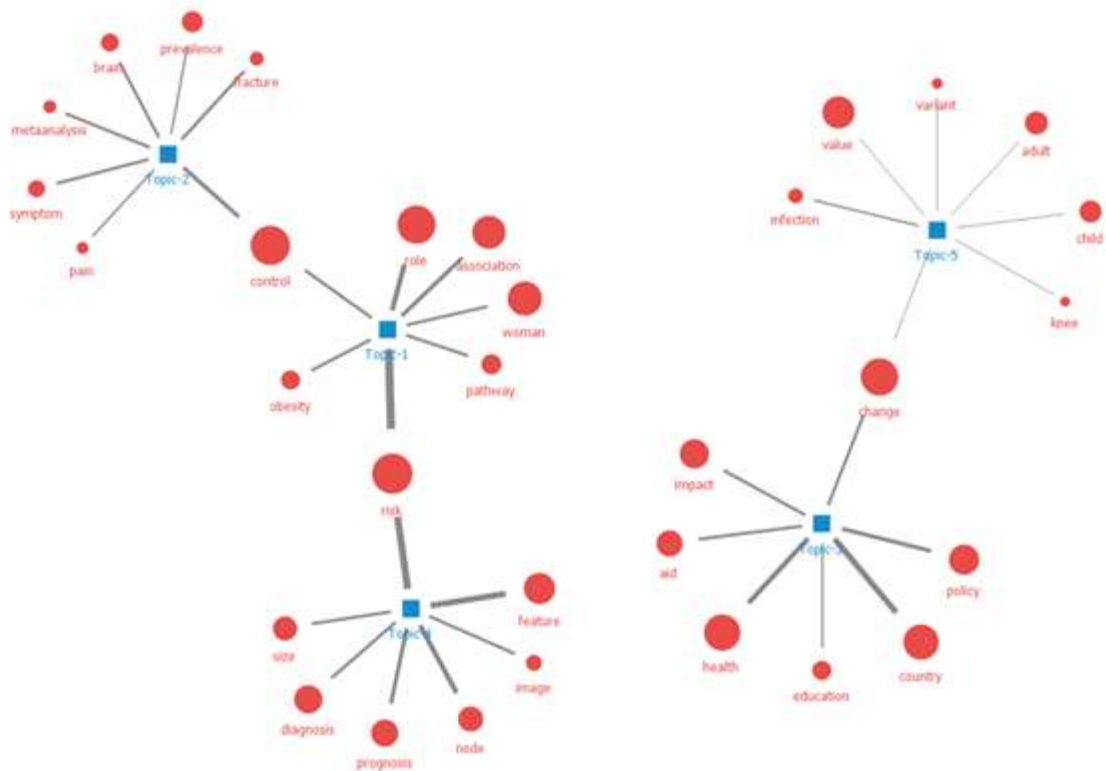


Figure 7 Five derived subject groups

As Figure 7 indicates, Topic 1 is composed of seven words: control, role, association, woman, pathway, risk and obesity. This topic 1 implies that gender-related ODA projects can be centred on associations. Topic 2 consists of words such as *ascontrol*, *fracture*, *prevalence*. This group of subjects shows that gender-related ODA projects are highly related to disease problems. Topic 3 is composed of words such as *country*, *education*, *health*, *aid* and *impact*. This topic shows that education and health are important areas of gender issues. Topic 4 is made up of words such as *image*, *node*, *prognosis*, *diagnosis* and *size*. This topic shows that gender-related ODA projects are involved in pre-diagnosing risk. Topic 5 consists of *change*, *knee*, *child*, *adult*, *variant*, *value* and *infection*. This shows that gender-related ODA projects are also directly connected to the prevention of infectious diseases in children and adults.

#### 4.2.3 Analysis of concentric circles and centrality

Through concentric circle analysis, it is possible to grasp the positions of words that play a key role. As a result of the concentric circle analysis shown in Figure 8, the positions of the keywords can be confirmed.

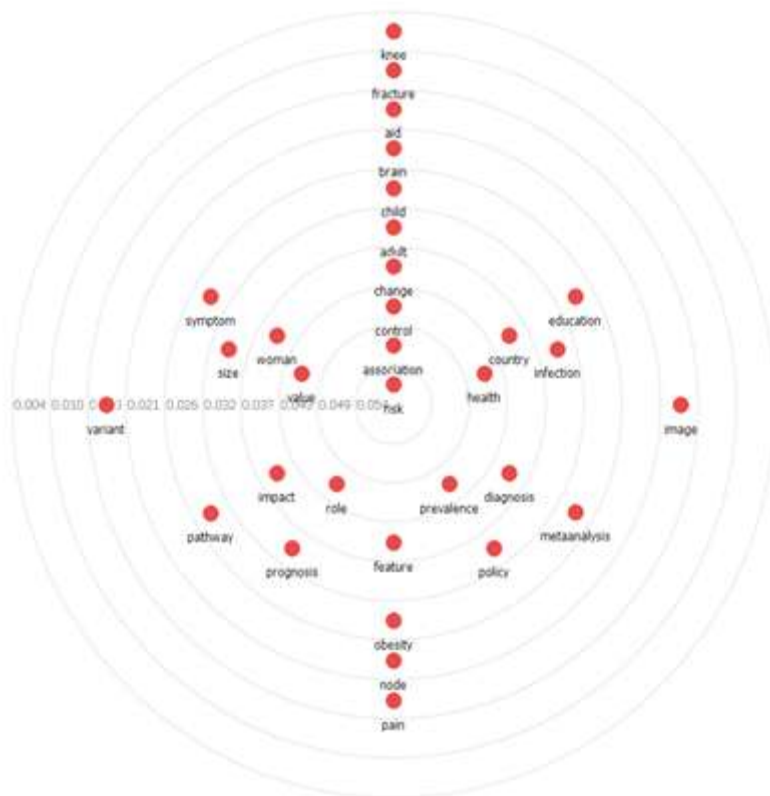


Figure 8 Concentric circle analysis of word network by analysis of foreign literature

The keywords are listed in the order of introverted connection-centredness (in-degree centrality) as shown in Table 2.

Table 2 In-degree centrality score (foreign papers)

		1	2
		Degree Centralit	Degree Centra
1	risk	0.059789	0.059789
2	association	0.053076	0.053076
3	role	0.047708	0.047708
4	prevalence	0.045477	0.045477
5	health	0.045408	0.045408
6	control	0.044523	0.044523
7	value	0.044071	0.044071
8	change	0.042174	0.042174
9	country	0.041270	0.041270
10	woman	0.040739	0.040739
11	feature	0.039397	0.039397
12	impact	0.038213	0.038213
13	diagnosis	0.037650	0.037650
14	adult	0.036160	0.036160
15	prognosis	0.034540	0.034540
16	size	0.033656	0.033656
17	policy	0.033493	0.033493
18	infection	0.032117	0.032117
19	symptom	0.031756	0.031756
20	child	0.030549	0.030549
21	pathway	0.028448	0.028448
22	obesity	0.027849	0.027849
23	metaanalysis	0.027114	0.027114
24	education	0.026853	0.026853
25	brain	0.024146	0.024146
26	node	0.022841	0.022841
27	pain	0.020282	0.020282
28	variant	0.019884	0.019884
29	image	0.018383	0.018383
30	aid	0.018224	0.018224

The results for the connection centring analysis of the network of words occurring in foreign documents are shown in Figure 9.



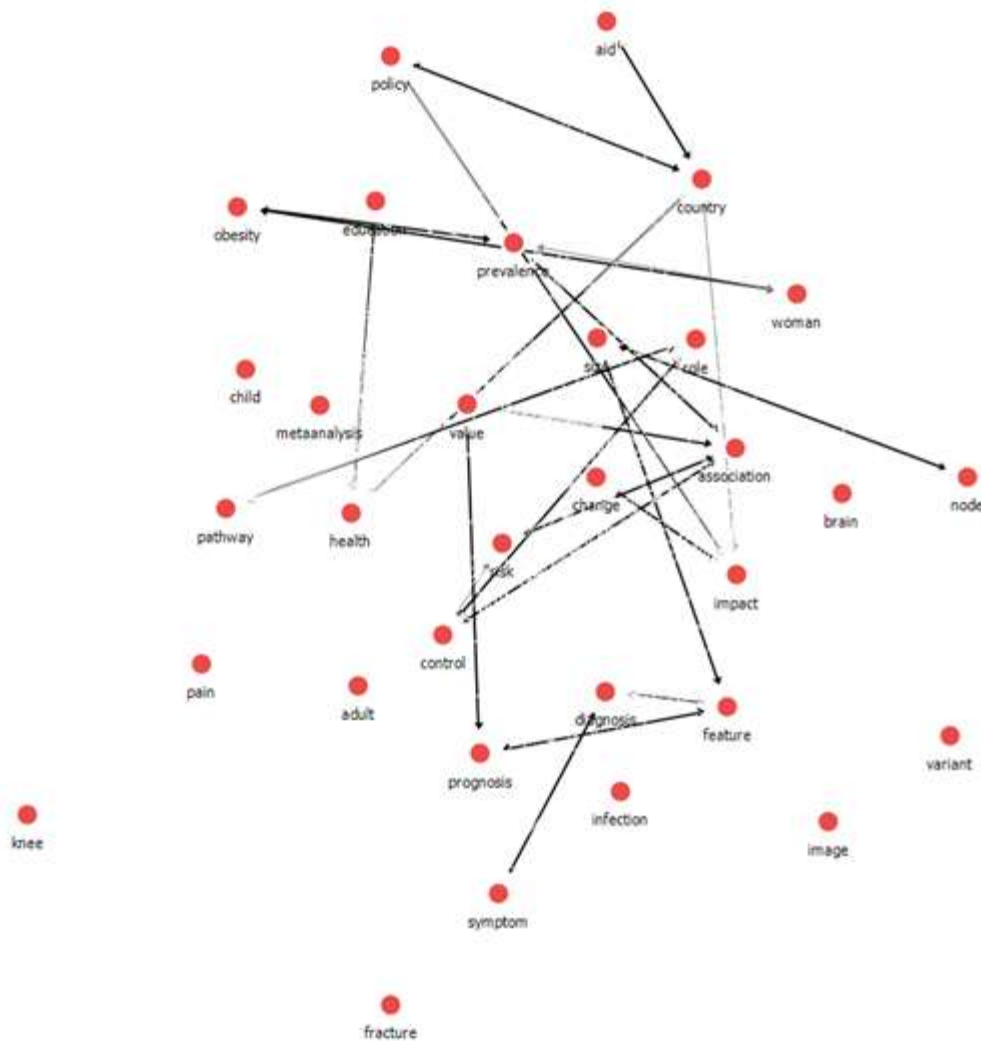


Figure 10 Abbreviated network by PFnet analysis (foreign literature)

#### 4.3 Comparisons and implications

Taking papers published in Korea and papers published in foreign countries that deal with topics relating to gender and ODA, we analysed the differences in the topics covered. If the differences between the topics covered are organized around the results of topic analysis, the results are as follows.

Taking first the case of Korea, five core topics can be identified. Topic 1 suggests that gender-related ODA projects might be related to exports to Africa. It can be seen that the ODA project is partially linked to the Korean economic problem. This may be said to be a research issue that requires further examination in the future. Topic 2 may be said to comprise a group of topics relating to the evaluation of gender-related ODA projects. It is difficult to evaluate the effects of gender-related ODA projects, and consequently the question of evaluation is becoming an important gender ODA issue. Topic 3 can be said to comprise a group of topics relating to education ODA. Topic 4 suggests that gender-related ODA projects can prevent corruption. Topic 5 shows that gender-related ODA projects are also closely related to the agricultural sector.

By contrast, looking at the academic papers published in foreign countries, we observe that Topic 1 suggests that gender-related ODA projects can be centred on associations. In other words, gender-related issues are being discussed not at the individual level but at the centre of the group. Topic 2 suggests that gender-related ODA projects are closely related to problems of disease. It shows that women play a central role in caring around family diseases. Topic 3 shows that education and health are important gender issues. This relates also to the general role of women. Topic 4 shows that gender-related ODA projects are involved in pre-diagnosing risk. Topic 5 shows that gender-related ODA projects are also directly connected to the prevention of infectious diseases in children and adults. These five themes are

shown to be important subject areas covered by the gender-related ODA projects that have been discussed in Korea to date.

In light of these points, several implications of the study can be identified. First, when Korea conducts ODA projects aimed at protecting women's rights and strengthening women's capabilities in the future, it will be necessary to establish a new analytical framework to evaluate these projects. Gender-related ODA projects have many intangible aspects, making it difficult to evaluate them quantitatively. Nevertheless, the field of gender-related ODA projects is expected to continue expanding. In view of this, scientific evaluation is required of the framework and indicator system that can quantitatively evaluate the short-, mid- and long-term effects of gender-related ODA projects.

Second, the gender-related ODA project needs to be conducted in connection with disease management, family care, education and health, rather than simply obsessing with women's rights and interests. This should happen not simply in the form of individual projects, but through a programme expressed as a group of linked projects. The need for ODA to be established and executed in the form of interconnected and organically connected programmes is greater than the need for it to function through individual and fragmentary projects. Third, the gender issue suggests that there is a need to draw on numerous organizations that can deal with these issues at a collective level. All these points will need to be taken into account in the process of forming and executing gender-related ODA projects in the future.

## V. CONCLUSION

The aim of this study was to discover which topics should be reflected in ODA projects in order to further enhance the effectiveness of gender-related ODA projects, which are expected to become more important in the future. For this purpose, I focused on analysing what are the central research topics of recent ODA projects relating to gender. To this end, academic papers on gender-related ODA projects were analysed using the text mining method. As a result of comparing papers published in Korean journals with papers published in foreign journals, various differences were found. In Korea, there is insufficient experience in promoting gender-related ODA projects, but major foreign donors have been conducting projects in this field for a long time. Therefore, in the future, it is necessary to conduct gender-related ODA projects in Korea by focusing on programmes rather than individual projects, and at the same time there is a need to address gender issues in combination with disease-, health- and education-related issues.

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