AN ANALYSIS OF KOREA NEWSPAPER REPORTING ON INTIMATE PARTNER VIOLENCE ¹ Eunmi Ham, ²Sanghee Jeong

ABSTRACT

Objectives: The objective of this study is to interpret the meanings of key topics shown in keywords about intimate partner violence by comparing the progressive media (The Hankyoreh, The Kyunghyang Shinmun) and the conservative media (The Chosun Ilbo) according to the political tendency targeting the intimate partner violence. Methods: Selecting total 450 cases including 244 cases in the progressive media and 206 cases in the conservative media, reported from January 1st 2014 to December 31st 2019, this study extracted five topics each by using the LDA(Latent Dirichlet Allocation)-based topic modeling. Results: In the results of topic modeling analysis, the intimate partner violence was formed into common topics about violent criminalization, reinforcement of investigation, and non-consent circulation of sexual video in progressive newspapers and conservative newspapers. As differentiated topics, the progressive newspapers drew the violation of a right of sexual self-determination and the support measures for gender violence while the conservative newspapers drew the patriarchy-based hatred culture and strong legislation as topics. Discussion: This study implies that the newspaper reporting on intimate partner violence shows different reporting types according to the political tendency.

Keywords:

Intimate partner violence, Newspapers as topic, Mass media, Data mining. Article Received: 18 October 2020, Revised: 3 November 2020, Accepted: 24 December 2020

¹Konkuk University GLOCAL Campus, Cheongju, Korea. Email: hem2003@kku.ac.kr ² Mungyeong College, Mungyeong, Korea. Email: jshwater79@gmail.com

Introduction

Compared to the past, in modern society, the sexual openness and heterosexual or homosexual intimate relationships are more freely and frequently happening. When a conflict is intensified by the discordance of emotional or sexual intimacy, however, the problem-solving process causes some violent behaviors through unilateral pressure or interference under the mask of affection, which could be interpreted as intimate partner violence (Park, 2015). In other words, the intimate partner violence could be defined as а concept including physical/emotional/sexual violence or assault, stalking, and crime caused by separation in heterosexual or homosexual relationships. The intimate partner violence shows the form of violent crime that is evolving to the circulation of counterpart's sexual video with the abuse of media, threat, murder, and suicide. On top of high risk of revenge, it arouses the sexual harassment in the victim and also controls the victim's behaviors (Han & Lim, 2019; Lee, 2019; Park, 2015). This whole thing is caused by the occurrence of gender-based hierarchy by the assailants' distorted perception and androcentric culture, so that the intimate partner violence should be perceived as a crime in need of tough punishment and action (Gu & Park, 2019; Park, 2015).

After the intimate partner violence was frequently discussed as a social agenda, the government proclaimed the 'Violence Against Women Act' on December 24th 2018 as a meaning in which the state would be responsible for the prevention of violence and protection/support of victims. However, as the issues of this bill, some problems were posed like the reverse discrimination against men and the exclusion of sexual minorities within the legal system. Even in the aspect of effectiveness, it would be necessary to have the institutional complementation (reinforcement of punishment of assailants and protection/support of victims) (Lee, 2019; Lee, 2018). Even though the acts on special cases related to intimate partner violence have been proposed since 2016, they are still pending in the National Assembly. In terms of punishment, it is simply treated as a general crime of violence by applying the Act on Sexual Crime of Violence and the Minor Offences Act without considering the specificity of infinite partner violence. For this reason, the intensity of punishment is weak, and there is a question about the effectiveness of crime deterrence (Lee, 2019). Examining the research theses on intimate partner violence (Lee, 2018; Lee & Chong, 2020) they concentrated too much on university students as research subjects, divided the types of intimate partner violence, mainly verified the moderating effects of mediating variable between intimate partner violence by exploring the risk factors and protection factors of violence as research theme, and argued the limitation on the exploration of unmentioned variables. Also, with the enactment of the 'Violence Against Women Act', the underlying factors of violence are mainly focused on, so that there have been insufficient researches that understand how the severity or perception of intimate partner violence is delivered to the general public (Gu & Park, 2019; Lee, 2018; Lee, 2018; Lee & Chong, 2020; Park, 2015). In the process of perceiving the intimate partner violence as a social problem, instead of handling the reality as it is, the newspapers report the reality intended by the media, so that they not only have influences on the government policies, but also become a window for the provision of information that could decide how the public would accept the social problem (Choi & Kweon, 2014). The newspaper reporting of Korea reveals the partisanship of progressive party and conservative party, and also has different attitude toward reporting according to the ideological inclination, so that it is possible to see their differences in perspective when handling a social problem (Choi & Han. 2012: Lee. Lee. & Sohn. 2019). As it is rare to find the actual researches on the realistic composition according to the inclination of political ideology under the theme of intimate partner violence, the topic modeling applying the

text mining technique could be used for changing the unstructured form of newspaper reporting into the structured form, selecting the hidden keywords within texts, and then exploring and using the knowledge (Chang, 2013; Lee, 2018).

Thus, the objective of this study is to interpret the meanings of key topics shown in keywords about intimate partner violence through the LDA (Latent Dirichlet Allocation)-based topic modeling by comparing the newspaper reporting of the progressive media(The Hankyoreh, The Kyunghyang Shinmun) and the conservative media(The Chosun Ilbo, The Donga Ilbo) according to the political tendency targeting the intimate partner violence (Hwang, Im, & Kim, 2015; Kang, Lee, & Jho, 2019).

Method

Study Subjects

This study selected the progressive media(The Hankyoreh, The Kyunghyang Shinmun) and the conservative media(Thu Chosun Ilbo, The Donga Ilbo) in KINDS(www.bigkinds.or.kr) as the analysis service of the Korea Press Foundation, utilizing the big data technology based on newspaper reporting DB related to intimate partner violence. In the detailed search method of KINDS, the type of search was "news"; the scope of search was "morphological analysis" and "the whole"; the keywords were "intimate partner violence", "violence between lovers", and "separation crime"; the period of search was January 1st 2014 to December 31st 2019. Total 472 cases were initially collected, and then this study excluded 52 cases which were not related to the intimate partner violence such as movements, introduction of figures, personnel matters, notice of event, book, introduction of drama, and election pledges. Total 450 cases were selected including 244 cases of the progressive media and 206 cases of the conservative media.

Statistical Analysis

In the data preprocessing, the collected newspaper articles were catalogued by composing the entity information under the data, article contents, and newspaper company name through MS Office Excel. This study refined the Hangeul (Korean alphabet) texts into word elements (noun) through the morphological analysis with the natural language processing by using a network analysis program, NetMiner4.0 (Cyram Inc. Seoul, Korea). After excluding prepositions and postpositions from search terms as stopwords, such synonyms and excluded words were selected as control words.

To understand the major attributes of newspaper articles, this study applied the term weighting technique called the TF-IDF (Term Frequency-Inverse Document Frequency) showing the value of multiplying the Term Frequency (TF) which is the frequency of the relevant term shown in a specific document by the Inverse Document Frequency (IDF) showing the importance of the relevant term, and the value estimates the importance of a specific term (Robertson, 1977; Salton & Buckley, 1988). The topic modeling is a statistical technique for estimating the topic of a document and even the probability distribution of terms composing each topic (Chang, 2013). Using the most-used LDA(Latent Dirichlet Allocation) technique as a probability model that could estimate the existence of topic within document, this study conducted the topic analysis by setting up as MCMC > alpha 10, beta 0.1, no of iteration=1,000 based on preceding literature (Griffiths & Steyvers, 2004; Lee, 2016).

Results

Keyword Frequency Analysis

To understand the keywords of intimate partner violence, the number of word appearance and the value of TF-IDF were presented. This study extracted total 5,066 words from 244 progressive newspaper cases and total 4,463 words from 206 conservative newspaper cases. In the frequency analysis, the keywords of progressive newspapers were highly shown in the order of 'woman', 'public authority', 'wound', 'victim', and 'man' while the keywords of conservative newspapers were highly shown in the order of 'woman', 'wound'. 'man', 'public authority', and 'acquaintance'. In the top ten keywords extracted from the order of the value of TF-IDF, the

progressive newspapers were highly shown in the order of 'man', 'crime', 'accident', 'violence', and 'tool for crime' while the conservative newspapers were highly shown in the order of 'victim', 'crime', 'accident', 'investigation', and 'tool for crime'(Table 1).

NO	Progressive News	papers	Conservative Newspapers			
	Frequency	TF-IDF	Frequency	TF-IDF		
1	Woman	Man	Woman	Victim		
2	Public authority	Crime	Wound	Crime		
3	Wound	Accident	Man	Accident		
4	Victim	Violence	Public authority	Investigation		
5	Man	Tool for crime	Acquaintance	Tool for crime		
6	Violence	Victim	Victim	Report		
7	Accident	Investigation	Entertainment world	Assault		
8	Crime	Acquaintance	Crime	Man		
9	Assailant	Assailant	Accident	Suspicion		
10	Sexual violence	Sexual violence Damage		Lover		

Table 1. Ter	10 Vouwonda	hy Frequence	and TE IDE
Table 1: Top	0 10 Keywords	by F requency	and IF-IDF

Topic Analysis

In the results of analyzing the newspapers considering the political tendency using the topic modeling analysis, five topics each were drawn. In the progressive newspapers, the keywords of Topic 1 included 'sexual violence', 'victim', 'media', 'assailant', and 'sexual assault'. They were shown as an attempt to inform the assailantcentered oppressive controlling behavior by referring the sexual crimes of victims to the public through the media, so that the topic name was called violation of a right of sexual selfdetermination. The keywords of Topic 2 were 'femicide(Revengeful murder 'victim', of woman)', 'domestic violence,' 'assailant', and 'stalking'. They were understood as the severity of crime in which the violence could be evolved to a murder of woman, so that the topic name was selected as violent criminalization. The keywords Topic 3 included 'customized-support', of 'guideline', 'council', 'violence against women', and 'preventive education'. As they looked as the institutional relation for preventing the 2nd damage of sexual discrimination, the topic name was called support measures for gender violence. The keywords of Topic 4 were 'public authority

organization', 'tool for crime', 'report system', 'smartphone', and 'investigation under arrest'. They were shown as the topics related to the investigation authorities' reinforcement of responsiveness to sites because of new kinds of sex crime, so that the topic name was called reinforcement of investigation. The keywords of Topic 5 included 'SNS(Social Network Services)', 'entertainment world', 'illegal shooting', 'hatred against women', and 'anger'. As they reflected the relation between sexual objectification of women and illegal shooting/circulation, the topic name was called non-consent circulation of sexual video (Table 2, Figure 1).

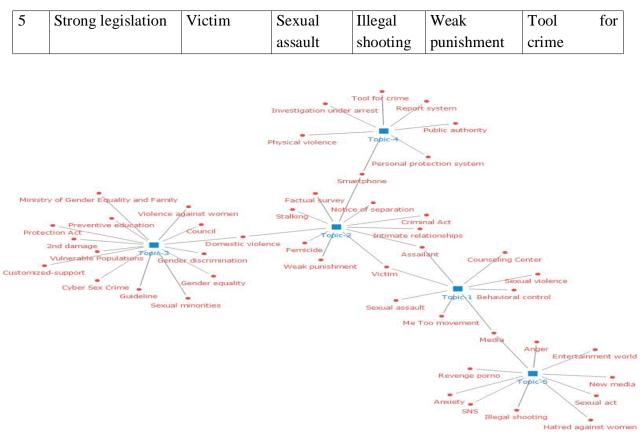
In the conservative newspapers, the keywords of Topic 1 included 'media', 'hatred against women', 'SNS', 'anger', and 'new media'. They were understood as the spread of gender hatred through the change of various media in the patriarchal social structure, so that the topic name was called patriarchy-based hatred culture. The keywords of Topic 2 were 'entertainment world', 'sexual act', 'SNS', 'behavioral control', and 'physical violence'. As the similar keywords to Topic 5 of the progressive newspapers, the severity of intimate partner violence was exposed through the entertainment world, so that the topic name was called non-consent circulation of sexual video. The keywords of Topic 3 included 'public authority', 'tool for crime', 'investigation under 'personal protection system'. arrest'. and 'CCTV(closed-circuit television)'. They were the topics related to the investigation authorities' reinforcement of responsiveness to sex crimes, and those keywords were similar to the ones of Topic 4, so that the topic name was called reinforcement of investigation. The keywords of Topic 4 were selected as 'femicide', 'notice of separation', 'smartphone', 'preventive education', and 'the socially-underprivileged'. As the similar keywords to the ones of Topic 2 in the progressive newspapers, they showed the severity of sex crime damage, so that the topic name was called violent criminalization. The keywords of Topic 5 included 'victim', 'sexual assault', 'illegal shooting', 'weak punishment', and 'tool for crime'. As they implied the necessity of strict regulations reflecting the specificity of intimate partner violence, the topic name was called strong legislation (Table 3, Figure 2).

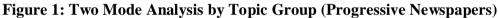
Table	2: Re	esults of Topic	Modeling	on Intimat	e Partner	Violence in	Progressive N	Newspapers (N	=244)

NO	Topic group	1 st	2 nd	3 rd	4 th	5 th Keyword
		Keyword	Keyword	Keyword	Keyword	
1	Violation of a right	Sexual	Victim	Media	Assailant	Sexual
	of sexual self-	violence				assault
	determination					
2	Violent	Victim	Femicide	Domestic	Assailant	Stalking
	criminalization			violence		
3	Support measures for	Customize	Guideline	Council	Violence	Preventive
	gender violence	d-support			against	education
					women	
4	Reinforcement of	Public	Tool for	Report	Smartphon	Investigation
	investigation	authority	crime	system	e	under arrest
5	Non-consent	SNS	Entertainme	Illegal	Hatred	Anger
	circulation of sexual		nt world	shooting	against	
	video				women	

Table 3: Results of Topic Modeling on Intimate Partner Violence in Conservative Newspapers (N=206)

NO	Topic group	1 st Keyword	2 nd	3 rd	4 th Keyword	5 th Keyword
			Keyword	Keyword		
1	Patriarchy-based hatred culture	Media	Hatred against women	SNS	Anger	New media
2	Non-consent circulation of sexual video	Entertainme nt world	Sexual act	SNS	Behavioral control	Physical violence
3	Reinforcement of investigation	Public authority	Tool for crime	Investigat ion under arrest	Personal protection system	CCTV
4	Violent criminalization	Femicide	Notice of separation	Smartpho ne	Preventive education	The socially- underprivileg ed





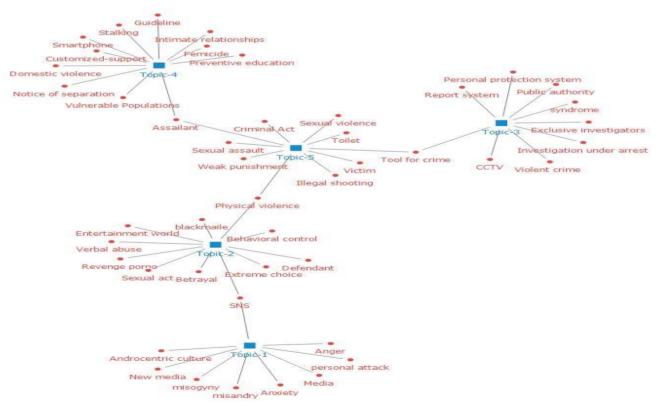


Figure 2: Two Mode Analysis by Topic Group (Conservative Newspapers)

Discussion

In the results of topic modeling of the progressive newspapers and conservative newspapers related to intimate partner violence in this study, total three topics such as violent criminalization, reinforcement of investigation, and non-consent circulation of sexual video were identically drawn. Even though the violent criminalization reported the importance of change in the perception of it as a serious crime as the form of violence could be viciously evolving to domestic violence, stalking, and femicide, the re-reporting tended to highlight the victimized women. It was also insufficient to handle the fundamental causes and alternative in order to perceive the intimate partner violence as a violent crime, and a preceding research (Lee, 2019) also showed the same results. Thus, it would be necessary to have the in-depth measures for improving the correct perception of gender in relation to female crimes. The reinforcement of investigation implied the necessity to strengthen the investigation authorities' responsiveness to the sites by minimizing the damage of intimate partner violence through the reinforcement of public authority of investigation authorities. The arrangement of exclusive investigators, early intervention through 112 report system. investigation under arrest, and personal protection measures for victims were reported as the measures for raising the investigation authorities' responsiveness to hidden crimes (Lee, 2018). Even though such reports could have positive effects as the measures for reinforcing the investigation of intimate partner violence, it would be still needed to establish the system considering the administrative improvements such as supply of investigation manpower through the reinforcement of investigation, investigators' perception of intimate partner violence, and the possible range of executing the legal public authority. As a form of revenge by circulating the sexual intercourse images without consent by using various media, the non-consent circulation of sexual video mentioned the name 'revenge porno'. The look of consuming the circulated revengeful videos by reducing women as a tool for sex was sensationally highlighted in the articles. Through this report, the circulated videos are spreading to many unspecified people and then reproduced as illegal images, which could cause the serious secondary damage to victimized

women (Park, 2019). Thus, the media should regulate to avoid such provocative reporting and also to seek for careful reporting. It would be also necessary for the government to seek for the budget organization or institutional measures for deleting harmful videos.

Examining the differences of topics between progressive newspapers and conservative newspapers, the progressive newspapers drew the violation of a right of sexual self-determination, and the support measures for gender violence. They report that the violation of a right of sexual self-determination is the restriction on autonomy and behavioral control on a victim's sexual act forced by assailant's assault, violence, and threat through various media. This means the violation of self-determination and physical safety, instead of sexual consent, which is defined as a crime of violence (Kim, 2019; Park, 2020). This report could provide a chance to implant selfconsciousness of the violation of a right of sexual self-determination by others, and also imply the necessity to have the independence in one's own sexual behavior. As the support measures for minimizing the exposure to the secondary crime or damage to the dignity of victims of intimate partner violence, caused by gender discrimination and prejudices, the support measures for gender violence highlighted the connection with specialized institutions, legal consultation, free consultation, emergency protection, psychological counseling support, living expenses, and medical support in reporting. Even though the government is considering the institutional measures for preventing the secondary damage of intimate partner violence (Han & Lim, 2019), it would be necessary to establish the support measures focusing on gender in priority, and also to seek for the effective protection laws and preventive education suitable for the gender equality for the change of social perception.

The conservative newspapers drew the patriarchybased hatred culture and strong legislation. Regarding the patriarchy-based hatred culture, they reported that the power relations between unequal gender were generated based on the patriarchal culture of Korean society, which was led to the occurrence of hatred culture. Some preceding researches also viewed that the rapid change of mass media was encouraging the cultivation of hatred culture through stereotypes and learning of gender roles (Gu & Park, 2019; Lee & Heo, 2014). In the roles of newspapers, the importance of neutral and objective reporting considering the gender sensitivity was reported. However, the concrete coping measures such as the prevention of cultivation of hatred culture and practical guidelines were relatively insufficient, so that it would be required to suggest the detailed coping measures in case when producing such reporting. Regarding the strong legislation, they reported that the intimate partner violence caused serious physical, psychological, and financial damages to victims as the intensity of violence got evolved. However, the level of punishing the assailants was weak compared to their criminal act, which implied the necessity of stronger legal restraint (Lee, 2019; Park, 2015). It would be necessary to have the suggestions considering the tougher level of punishment and the improvement of perception of intimate partner violence for the enactment of laws.

Presenting the limitations and suggestions of this study, first, the analysis on changes in the reporting trend of each period (ten years or up) according to the political tendency of conservative newspapers and progressive newspapers would bring about significant discussions. Second, even though this study collected data by limiting to newspaper articles, it would be necessary for the follow-up researches to expand the scope of information in order to collect/analyze various text information using newspaper articles, theses, broadcasting news, and SNS, suitable for the flow of time.

In conclusion, this study implies that both progressive newspapers and conservative newspapers show the formation of common topics for reconsidering the intimate partner violence as a social problem. However, in the aspect of proactive prevention, the progressive newspapers form the perspective of gender-based violence as their topics, and the conservative newspapers highlight the institutional improvement as their topics, which shows the ideological differences between them.

REFERENCES

- Chang, J. Y. (2013). A study on research trends of graph-based text representations for text mining. The Journal of The Institute of Internet, Broadcasting and Communication, 13(5), 37-47.
- [2] Choi, Y. J., & Kweon, S. H. (2014). A Semantic network analysis of the newspaper articles on big data. Journal of Cybercommunication Academic Society, 31(2), 241-286.
- [3] Choi, J. H., & Han, D. S. (2012). The partisanship of media and the media intervention in political-power creation in korea: Focusing on the analysis of the major newspapers' editorial articlesduring the 13-17th presidential election campaigns. Journal of Communication Science, 12(2), 534-571.
- [4] Griffiths, T. L., & Steyvers, M. (2004). Finding scientific topics. The Proceedings of the National Academy of Sciences, 101(2), 5228-5235.
- [5] Gu, H. K., & Park, H. J. (2019). A study on the legal systemization of date violent crime. 11(2), 2221-2234.
- [6] Han, S. H., & Lim, C. Y. (2019). A study on the prevention of dating violence and protection of victims. Han Yang Law Association, 30(1), 115-136.
- [7] Hwang, J. S., Im, S. H., & Kim, K. S. (2015). Network text analysis of newspaper editorials on highschool diversification policy. The Journal of Politics of Education, 22(3), 33-57.
- [8] Kang, S. J., Lee, Y. S., & Jho, W. S. (2019). Automated text analysis on media partisanship and sexual minority discourse in south korean society. Information Society & Media, 20(2), 145-174.
- [9] Kim, T. (2019). A study on violence and countermeasures on cyberspace corruption. The Journal of the Convergence on Culture Technology, 5(1), 51-58.
- [10] Lee, H. J. (2018). An analysis of recent research on dating violence in Korea. Journal

of Convergence for Information Technology, 8(4), 153-161.

- [11] Lee, M. S. (2019). The legal issues involved in and the legislative directions for preventing dating abuse. Hongik Law Review, 20(1), 461-489.
- [12] Lee, Y. D. (2018). A study on the police response to dating violence. Journal of Police and Law, 16(1), 151-178.
- [13] Lee, J. R., & Chong, K. S. (2020). The analysis of research trends in domestic dating violence. Korean Journal of Correctional Discourse, 14(1), 211-241.
- [14] Lee, S. S. (2018). Network analysis methods application and limitation (pp. 139-147). Cheongram.
- [15] Lee, G. O., Lee, S. Y., & Sohn, S. H. (2019). Study on the changes of healthcare news coverage from kim young-sam administration to lee myung-bak administration. Journal of Critical Social Welfare, 65, 43-74.
- [16] Lee, S. S. (2016). A study on the application of topic modeling for the book report text. Journal of Korean Library and Information Science Society, 47(4), 1-18.
- [17] Lee, J. Y. (2019). Frame analysis on the newspaper reports of femicide. Korean Association of Public Safety and Criminal Justice, 28(4), 318-348.
- [18] Lee, N. Y., & Heo, M. S. (2014). Gendered violence and gender regime in the neo-liberal state of South Korea. Reconceptualization and Reconstruction of Violence Against Women, 26(4), 58-90.
- [19] Park, H. J. (2015). Study on the risks and improvements of dating violence. Chosun Law Journal, 22(2), 449-521.
- [20] Park, H. H. (2019). Discussion on digital sexual crimes: Focused on the dissemination of non-consent sexual video reprisal pornographic material. Journal of The Korean Society of Private Security, 18(4), 105-124.
- [21] Park, J. H. (2020). Proposal for the legislation on the criminal non-consent rape: yes means yes rule, the negligent non-consent rape. Law Research Institute in University of Seoul, 28(1), 207-243.
- [22] Robertson, S. E. (1977). The probability ranking principle in IR. Journal of Documentation, 33(4), 294-304.

[23] Salton, G., & Buckley, C. (1988). Termweighting approaches in automatic text retrieval. Information Processing & Management, 24(5), 513-523.