" AFRICAN OFFICIAL DEVELOPMENT ASSISTANCE (ODA) DEM AND AND POLICY DIRECTIONIN THE POST-CORONA ERA."

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ABSTRACT:
This study is based on a social network analysis of newspaper articles relating to the Corona pandemic contained in the African daily newspaper *African News*. The aim of the study is to analyse what life-changes have been brought about in Africa as a result of the Corona pandemic, so that this information can be used in official development assistance policies for Africa. For this purpose, a text network analysis method was used. As a result of the analysis, the life-changes experienced by African residents as a consequence of the Corona pandemic are summarized into five broad categories. The five topics are: the Government's countermeasures against the virus; recovery measures in African countries; measures relating to personal health; Government measures relating to schools; and an increase in the number of deaths from Coronavirus. After the Coronavirus pandemic, the aid that should be provided most urgently to Africa is in the fields of health and education. It is hoped that aid donors will refer to the points found in this analysis and reflect them in their aid policy.

Keywords:
Corona pandemic, Africa ODA, topic analysis.
Article Received: 18 October 2020, Revised: 3 November 2020, Accepted: 24 December 2020

1 INTRODUCTION

On 6 December 2020, the number of confirmed Coronavirus cases reached 65,651,683 worldwide after the Secretary-General of the World Health Organization (WHO), on 11 March 2020, declared the Corona-19 pandemic, the highest grade among the six levels of infectious disease warning. At the time of writing (December 2020), the number of deaths has reached 1,519,193. By continent, there are 28 million people in America, 19 million people in Europe, 11 million people in Southeast Asia, 11 million people in the Eastern Mediterranean, 91 million people in the Western Pacific and 1.35 million people in Africa. However, it is estimated that the actual number of confirmed cases will be higher in vulnerable countries such as Africa, owing to shortage of diagnostic kits and medical personnel.

The WHO warns that, even if vaccines and treatments for Corona are developed and put into action, a so-called 'endemic' such as Corona human immunodeficiency virus (HIV) may arrive and never disappear. 'Endemic' means that infectious diseases continue to occur in a specific area, malaria being a representative example (Aker et al., 2010). In other words, even if a vaccine is made and a cure found, the threat of Corona-19 can lead to an endemic that lasts for ever, never completely disappearing.

It is difficult for anyone to be sure how the Corona situation will develop in the future, but many specialized research institutes and experts have found it difficult to envisage a complete return to the pre-Corona era even if vaccines and treatments are discovered and cures found. It is said that a 'new normal' of living with the disease will be created.

It is difficult for anyone to accurately predict when the Corona will be completely ended or whether it will continue as an endemic phenomenon. One of the biggest differences between the world before and after the Corona crisis is that the gap between rich and poor will widen, and it is generally agreed that 'social distancing' and a non-face-to-face culture will

spread in everyday life. It is clear that Official Development Assistance (ODA) has a very important role to play in this new culture, whether Coronavirus develops or ends.

The social changes caused by Corona, whether 'post-Corona' or 'with Corona', will inevitably strongly influence the establishment and execution of Korea's ODA policy. In particular, among countries receiving aid from Korea, Africa, where the degree of poverty is severe (Choi & Kim, 2018; Corbett & Fikkert, 2012; Hynes & Scott, 2013; OECD, 2020), may be greatly affected by Corona in terms of the daily lives of its citizens. In the long run, this could make it even more difficult than at present for African countries to achieve Sustainable Development Goals.

Against this background, this study aims to redesign the ODA policy direction for African continental countries in the post-Corona era. To achieve this, it first analyses what kind of life-changes people in African countries are experiencing as a result of the Corona pandemic. Secondly, as its main research purpose, it classifies the changes in life patterns caused by the Corona pandemic by placing them in a number of topic groups.

2 RESEARCH DESIGN

In terms of its scope, this study aims at a spatial targeting of African countries. The total number of countries in Africa is 54. However, the study does not take into account the circumstances of individual African countries, but targets the changes in circumstances that African countries are experiencing together.

In terms of content, the study aims, importantly, to address how African citizens have changed their life patterns after Coronavirus, and what new demands have arisen. The range of life needs varies from those connected with health to those relating to economic life. This study targets the overall life-changes of African residents after the Corona pandemic. In this connection, we analyse the articles about Corona published in *African News*, an African daily. Between 1 January 2020 to 31 August 2020, the number of Corona-related articles printed by *African News* totalled 176.

In terms of its span, this study covers the period from January 2020 to 31 August 2020. This is considered to be the period when the Corona pandemic was most severe. Examining life-changes during this period allows us to grasp the life-changes of Africans. In terms its research methodology, this study adopts a social network analysis method (Markus et al, 2018; Laporte et al., 2018; Blei, 2012). This is a useful method for scientifically analysing unstructured text data. For this purpose, we use the Netminer 4.4 program.

3 ANALYSIS RESULT

(1) Word cloud analysis

First, word cloud analysis was conducted to enable us to understand the overall lifestyle changes of African residents in the wake of the Corona pandemic. The results are shown in Figure 1.

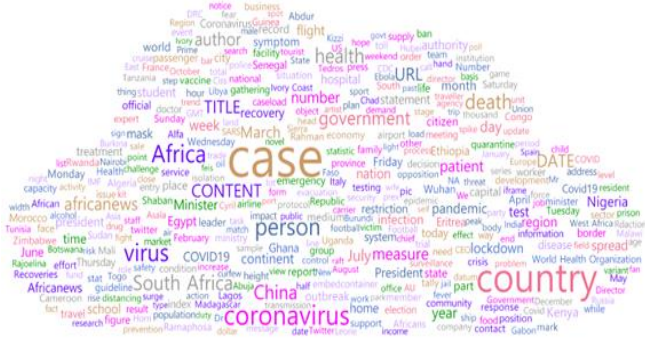

Figure 1 Word cloud analysis result

It can be seen that words such as 'case', 'country' and 'Coronavirus' appear prominently. The results of this word cloud analysis give us

a general picture of African citizens' lives, b ut do not provide in-depth knowledge.

As Table 1 shows, the social network for Afri cans consists of 5,140 words, 5,882 sentences and 4,328 paragraphs.

Words

		1	2	3	4
		rt of Speech(PC	Frequency	Word length	Name Type
1	case	Common Noun"	947.0	4.0	"-"
2	country	Common Noun"	636.0	7.0	"-"
3	coronavirus	Common Noun"	380.0	11.0	"-"
4	virus	Common Noun"	319.0	5.0	"-"
5	Africa	"Proper Noun"	317.0	6.0	raphical Name"
6	person	Common Noun"	315.0	6.0	"-"
7	death	Common Noun"	248.0	5.0	"-"
8	South Africa	"Proper Noun"	241.0	12.0	raphical Name"
9	health	Common Noun"	234.0	6.0	"-"
10	China	"Proper Noun"	219.0	5.0	raphical Name"
11	government	Common Noun"	211.0	10.0	"-"
12	measure	Common Noun"	167.0	7.0	"-"
13	patient	Common Noun"	148.0	7.0	"-"
14	number	Common Noun"	147.0	6.0	"-"
15	Nigeria	"Proper Noun"	119.0	7.0	raphical Name"
16	pandemic	Common Noun"	116.0	8.0	"-"
17	region	Common Noun"	113.0	6.0	"-"
18	continent	Common Noun"	113.0	9.0	"-"
19	test	Common Noun"	110.0	4.0	"-"
20	lockdown	Common Noun"	110.0	8.0	"-"
21	flight	Common Noun"	108.0	6.0	"-"
22	Minister	"Proper Noun"	107.0	8.0	"-"
23	nation	Common Noun"	106.0	6.0	"-"
24	spread	Common Noun"	105.0	6.0	"-"

Table 1 Frequency of word occurrence

The table indicates that the word which occur s most frequently in the social network relatin g to Africans' lives is 'case', which occurs 94 7 times in total. Next is 'country', which occ urs 636 times, followed by 'Coronavirus' (380 times).

(2) Life changes following Corona

Topic analysis was conducted to analyse the li fe-changes experienced by Africans following t he Corona pandemic. For this purpose, in ord er to simplify the network, we first abbreviate d it to include only words that occurred more than 24 times. As a result, 210 words were selected in total. The overall appearance of th e network composed of these 210 words can be seen in Figure 2.

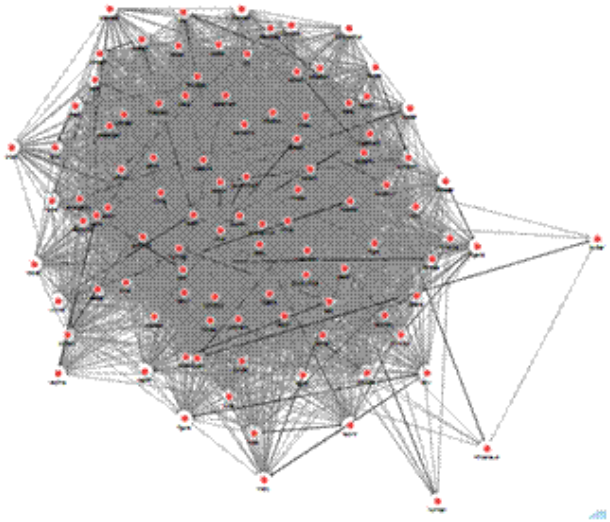

Figure 2 Network reduced to 210 words

However, in Figure 2, the nodes constituting the network and the links between nodes are not clearly distinguished. In order to remedy this, a simplified figure was needed, utilizing the PFnet function of the Netminer program. The simplified network diagram is shown in Figure 3.

Figure 3 Simplified network figure

The result of topic analysis on the nodes included in the above network is shown in Figure 4. As can be seen, there are five topics in total, summarizing the lifestyle changes of Africans since the Corona pandemic.

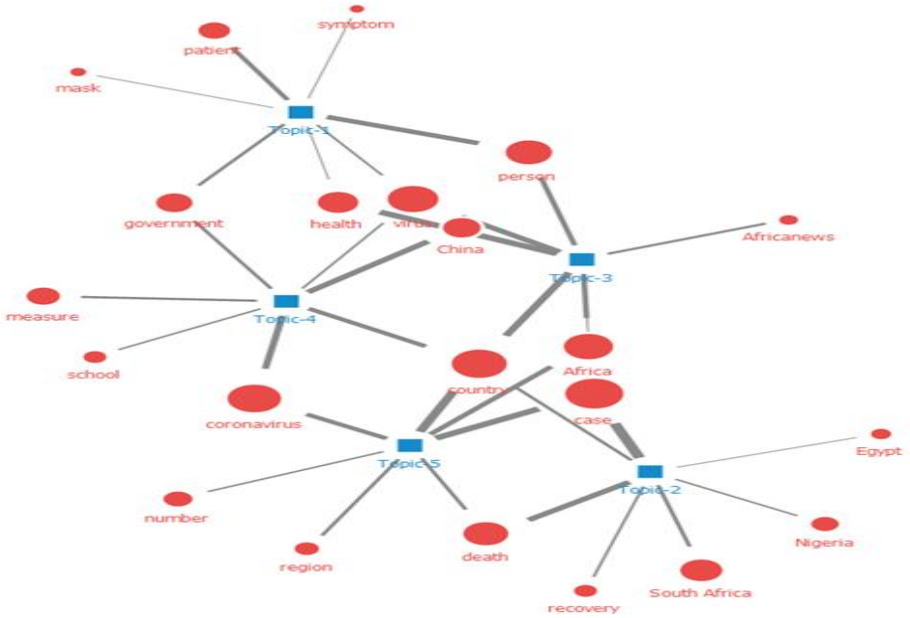

Figure 4 Topic analysis result

The topics classified above are explained individually as follows. Topic 1 is composed of words such as *virus*, *government*, *patient*, *mask*, *health*, *person* and *symptom*. This suggests it could be named 'Government virus response plan'. In other words, it can be said that this topic relates to the role of government, such as in having patients wear masks.

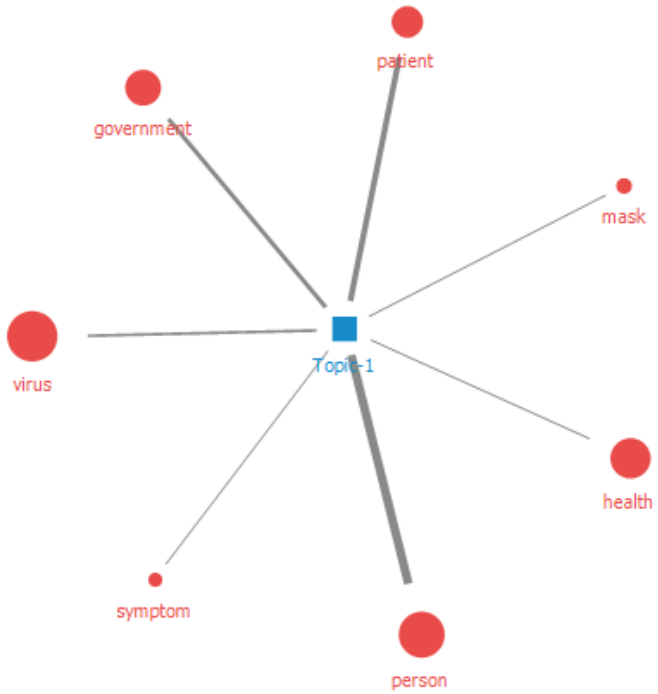

Figure 5 Topic 1: Government response to viruses

Figure 6 shows the components of Topic 2. Topic 2 consists of words such as *country*, *Egypt*, *case*, *South Africa*, *recovery*, *Nigeria* and *death*. We could name this topic 'African countries' recovery measures'. It suggests that African countries such as Egypt, Nigeria and South Africa are establishing various recovery measures in response to Coronavirus. In particular, countries such as these are showing positive measures to combat the virus.

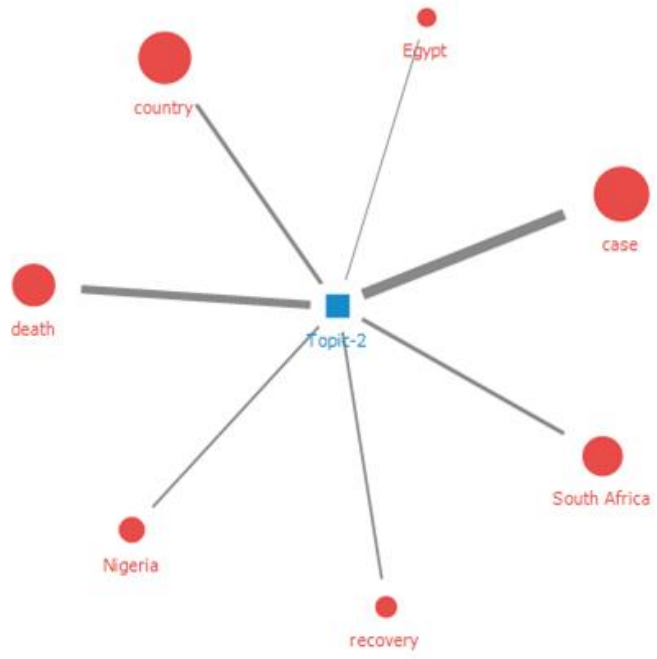

Figure 6 Topic 2: recovery measures for African countries

Figure 7 shows the words that make up Topic 3. These are *case*, *country*, *Africa*, *virus*, *per son* and *health*. This indicates that individual countries are greatly interested in the health p roblems of individuals. Thus, we could name this topic 'Measures for personal health'. In ot her words, considering the life-changes of all African citizens, it can be seen that health pro blems are causing the most.

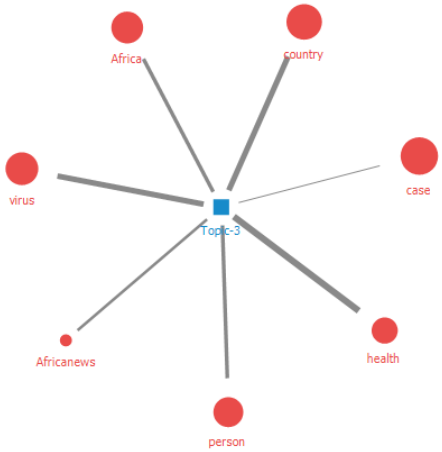

Figure 7 Topic 3: measures for personal heal th

Figure 8 shows the keywords that make up T opic 4. These are *country*, *China*, *school*, *mea sure*, *Coronavirus*, *government*, *virus*, etc. This topic overlaps somewhat with Topic 3, but is characterized by the inclusion of China. In oth er words, it implies that China is the source of the Corona outbreak. Topic 4 could be na med 'Government measures for schools'. In ot her words, Topic 4 suggests that the damage caused by Corona is greatly affecting schools, and emphasis is placed on the need for count ermeasures in schools.

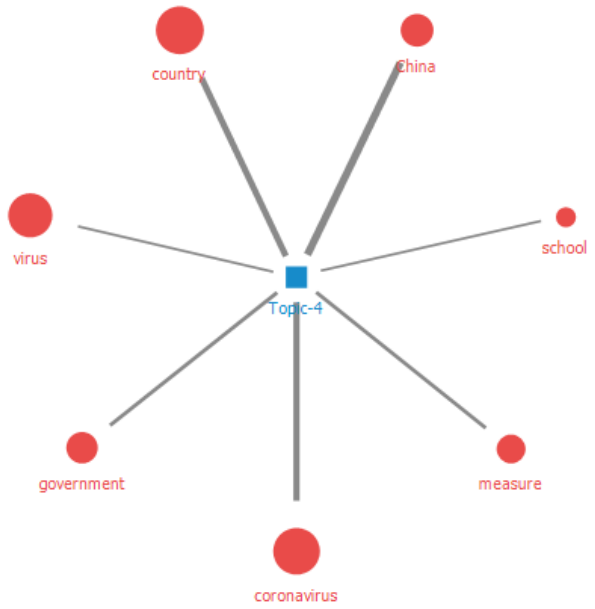

Figure 8 Topic 4: Government measures for schools

Figure 9 presents the words that make up Topic 5. It consists of words such as *case*, *country*, *region*, *Africa*, *number*, *death* and *Coronavirus*. We could name Topic 5 'Increase in the number of deaths from Corona'. It lets us know that the number of deaths from Corona in Africa is rising rapidly.

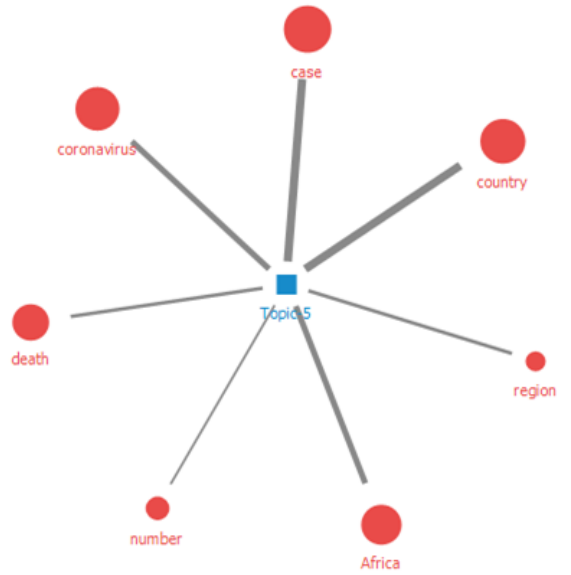

Figure 9 Topic 5: increasing number of deaths from Corona

As the above shows, when we look at changes in the lives of Africans following the Corona pandemic, we see that the biggest change is in the areas of health and education. This suggests both that the number of deaths is constantly increasing, and that various problems are occurring due to students being unable to attend school. In other words, it may be said that the health and education sectors are suffering more damage from Corona than other, industrial sectors.

4 CONCLUSIONS

Countries in Africa are expected to suffer the most damage from the Corona pandemic, owing to poor public health facilities (Mazzurco & Jesiek, 2017). However, as of 31 August 2020, considering the total population the ratio of confirmed cases is only 1 in 20 compared to that of other continents. This may be attributed to the small number of people who have been tested owing to a lack of test facilities. Contrariwise, however, it is believed that the active measures of African governments have been effective, such as the African countries' self-imposed blockades and active restriction of people's movements.

In summarizing changes in the lives of African citizens following the Corona outbreak, we can identify five broad categories. The five lifestyle changes are: the government's countermeasures against the virus; recovery measures in African countries; measures concerning personal health; government measures concerning schools; and an increase in the number of deaths from Coronavirus. Of course, it is difficult to say at this stage that the analysis results presented here have strong implications for aid providers that are implementing ODA (Bixler, 2011). Nevertheless, researching and classifying the difficulties that African citizens face after the Corona pandemic by means of the anal

ysis of newspaper articles is a potentially valu able exercise. In the future, in order to provid e ODA for African residents on a systematic basis, scientific methods such as social networ k analysis should be widely used.

ACKNOWLEDGEMENTS:

This work was supported by the Ministry of Education of the Republic of Korea and the National Research Foundation of Korea (NRF-2019S1A5C2A03082775).

REFERENCES

[1] Aker, Jenny C., and Isaac M. Mbiti. (2010). Mobile Phones and Economic Development in Africa, *Journal of Economic Perspectives*, 24(3): 207-32.

[2] Bixler, G. (2011). Extreme User Centered Design: Methodology for Soliciting and Ranking Requirements in User-Centered New Product Development, GHTC, IEEE.

[3] Blei, D.M. (2012). Probabilistic Topic Models. *Communications of the ACM*, 55(4), 77-84.

[4] Bretschneider, S.I. (1997). Introduction to a Symposium on Public Management Information Systems (PMIS). *Journal of Public Administration Research and Theory*, 7(1), 85-87.

[5] Choi, Young-Chool & Kim, Hak-Sil. (2018). Successful implementation of Korea' ODA projects: constructing causal loops and conducting sensitivity analysis. *International Journal of Entrepreneurship*, 22(1): 1-16.

[6] Corbett, S., & Fikkert, B. (2012). When helping hurts: how to alleviate poverty without hurting the poor—and yourself, Chicago: Moody.

[7] Cornish, W., LLewelyn, D., & Aplin, T. (2010). Intellectual Property: Patents, Copyright, Trademarks and Allied Rights (Seventh Ed). Sweet & Maxwell.

[8] Firth, A. (2002). Comparative Experiences in Australia, U.S.A., U.K. and Europe: Framework, Practices and Trends in the EU. In H.P.Knopf(Ed.), Security Interests in Intellectual Property. Thomson Limited Canada.

[9] Hurt, R. and Schuchman, R.(1996), "The Economic Rationale of Copyright," American Economic Review, 56, *Papers and Proceedings*, 421-432.

[10] Hynes, W. & Scott, S.. (2013). *The evolution of Official Development Assistance*. Paris: OECD.

[11] Kula, E., & Ozoguz, S. (2008). Development of intellectual property rights in Turkey and its implications for the Turkish economy. In R. Taplin & A. Nowak (Eds.), Intellectual Property, Innovation and Management in EmergingEconomies.

[12] LaPorte, D, Kim, E, & Smith, J (2017). Engineering to help Communities or Students' Development? An Ethnographic Case Study of an Engineering –to-help Student Organization, International Journal For Service Learning In Engineering, 12, 2: 103-117.

[13] Markus, M., Wolf, M. and Bauer, S. (2018). "Analyzing big data in social media: Text and network analyses of an eating disorder forum", *International Journal of Eating Disorders*, 51,7:.656-667.

[14] Mazzzurco, A. & Jesiek, B. (2017). Five Guiding Principles to Enhance Community Participation in Humanitarian Engineering Projects, *Journal of Humanitarian Engineering*. 5,2: 89-101

[15] OECD. (2020). OECD DATABASE, https://www.oecd.org/dac/stats/type-aid.h tm.

[16] Osterwalder, A., Pigneur, Y., & Clark, T. (2010). Business model generation: A handbook for visionaries, game changers,

and challengers, Hoboken: Wiley.

[17] Polak, P., & Warwick, M. (2013). The business solution to poverty: designing products and services for three billion new customers, San Francisco: Berrett-Koehler, Inc.

[18] Suluk, C. (2014). A Comparative Law Perspective of the Protection of Unregistered Industrial Products under Turkish Unfair Competition Law. FMR, I.

[19] Suluk, C., & Kenaroglu, Y. (2011). Emerging issues in Turkish intellectual property law. Istanbul Chamber of Commerce Publications.

[20] Takeyama, L.(1994), "The Welfare Implications of Unauthorized Reproduction of Intellectual Property in the Presence of Demand Network Externalities," *Journal of Industrial Economics*, 42, 155-166.