

# An Exploratory Study on COVID-19 and the Rights of Children based on Keyword Network Analysis

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## ABSTRACT

COVID-19 has become a worldwide health crisis. Around March 2020, the entire country was shut down, including schools. This resulted in significant changes in the lives of children. In this study, the researcher conducted a keyword network analysis utilizing Ucinet ver 6.716 and NetDraw ver 2.173, after gathering the data using Textom in order to examine the current status of the rights of children in a COVID-19 pandemic. The findings of this study were that the degree centrality was higher with poverty, educational institutions, parents, teachers, income support, child care, child-rearing, caring, online classes, and child welfare, etc. Therefore, it can be said that there is an urgent need for the implementation of the respect of the rights of children all over the world in this COVID-19 pandemic.

**Keywords:** COVID-19; Children's right; Big data; Network analysis; Children

## INTRODUCTION

The UN Committee on the Rights of the Children expressed concern over the impact of COVID-19 on children and made a statement demanding the roles of the member countries regarding the rights of the children to survive, be protected, grow, and participate.

Also, Human Rights Watch conducted a campaign, which demanded Prime Minister Kyriakos Mitsotakis of Greece to release the children who are incarcerated in unsanitary lockups of police stations or other incarceration facilities without their guardians accompanying them [1].

The reason why many international organizations such as the UN are concerned keenly about the rights of children in light of COVID-19 is that they are now facing a health crisis that can have their rights compromised. Firstly, children are exposed to significant risks in terms of nutrition, medical care, and hygiene, which are related to their very survival. UNICEF reported that the number of children in Congo who received vaccination decreased significantly after the beginning of the COVID-19 pandemic, fearing an increase in the number of serious disease cases among the affected children (comparing the numbers in January and February 2019 and 2020.) Also, selective measures are urgently needed for the children with needs, in light of poverty, migration, or refugees. ILO and UNICEF reported that, with every 1% of new families in poverty due to COVID-19, child labor is increased by 0.7%, aggravating the problem of child labor [2].

COVID-19 caused a significant change in terms of learning, leisure, and playing of the children, which are closely connected to their development. Professor Ikjoong Jeong of Iwha Women's University (Department of Social Welfare) reported that, in his presentation themed on "the changes in the daily lives of children after COVID-19 and their happiness," the level of perceived happiness among children decreased, while the level of anxiety about the future and stress level increased. Also, children face the difficulty of not having a chance to participate. Therefore, the government, local communities, and families communicate information related to COVID-19 in the language that children can understand and provide these children with the opportunity to participate in decision makings related to their rights.

Since the worldwide lock-down and school shut-down in March 2020, children had to stay at home for a very long period of time. With this, the fear of child abuse is also increasing, with the caregivers of the children under more stress. There have been a number of violence cases against children, which is now becoming a social issue. With a series of child abuse cases, the need for measures to prevent child abuse is also more urgent than ever. For this reason, the UN advised the governments of the world to pay more attention to protecting children and their rights as they plan and execute the measures to respond to and restore the society from COVID-19 in the guideline for the human rights, which was announced in April this year. The UN also advised that the support and protection of the children in a crisis must be the priority.

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As such, COVID-19 changed society in general, including the lives of children. Therefore, the researcher intends to examine the impact of COVID-19 on children's rights and examine the requirements for children's rights in a pandemic in order to protect the rights of children in COVID-19. In consideration of the fact that COVID-19 spread over a very short period of time, the researcher used big data to gather various types of data.

Big data is characterized by hyper-connectedness and hyper-intelligence in the era of the 4<sup>th</sup> Industrial Revolution, allowing the processing and analysis of a large amount of information from the Internet, to analyze complicated meanings and make inferences, which are the advantage of this new technology [3,4]. Especially, a network analysis using keywords makes it possible to analyze the overall structure of studies [5].

What are the requirements for children's rights under COVID-19?

## MATERIALS AND METHODS

### Data gathering

In this study, the researcher used Textom, a big-data analysis solution, to gather raw Data focusing on the headings and summary information of the search hits of search engines, including Naver, Daum, Baidu, Google, YouTube, and Facebook, etc. The data-gathering period was for one year, from August 28, 2019, to August 28, 2020. The raw data was gathered using the keywords of COVID-19+children's rights, and the total volume of the data gathered was 10.64 MB.

### Analysis tool

For the data gathering and refining of this study on COVID-19 and children's rights in this study, the researcher used Textom, a big-data analysis solution developed by The IMC Co., Ltd. Also, for the analysis of the network of the keywords that are related to children's rights, the researcher used Ucinet ver 6.716 and NetDraw ver 2.173 [6].

### Data processing and analysis

The raw data gathered for the purpose of this study by Textom went through the process of data cleaning in order to clarify their meanings for the outcomes of this study. As the first mining, the researcher conducted a text mining, focusing on the nouns included in the raw data gathered by Textom. The second refinement that

followed was performed using the 'Edit Now' function of Textom, so that the keywords that was irrelevant to the core keywords or not suitable for the analysis. This was followed by a frequency analysis based on the refined data after the 1<sup>st</sup> and 2<sup>nd</sup> data cleanings. Based on the result of the frequency analysis of the words extracted, 200 upper-level nodes were designated and used to prepare a 200 × 200 1-mode matrix data set [6].

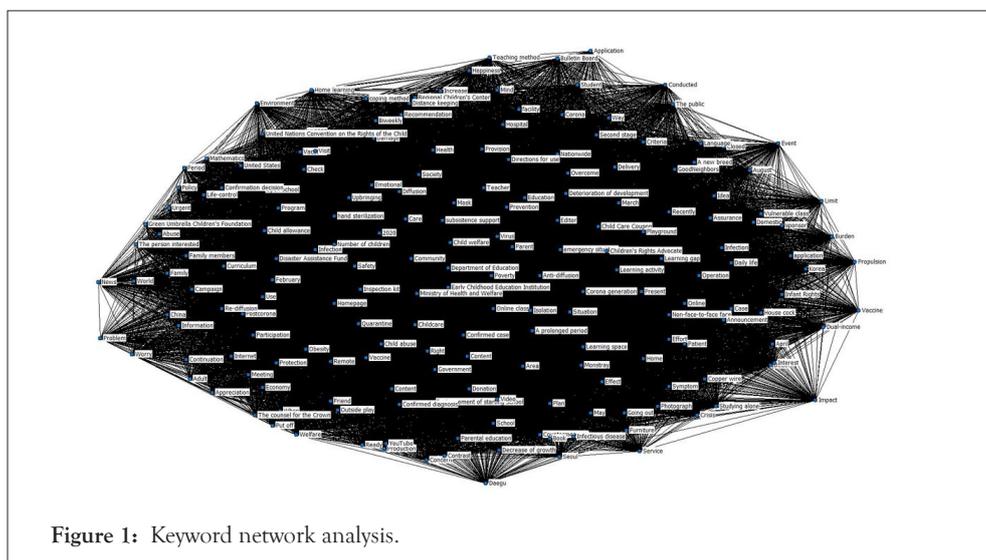
## RESULTS

Firstly, the researcher conducted a keyword analysis based on the refined data from the 1<sup>st</sup> and 2<sup>nd</sup> data cleaning. The result of the frequency analysis showed that the top-10 most relevant keywords for children's rights were as follows Poverty; Education institution; Parents; Income support; Teachers; Care; Rearing; Online learning; Childcare; Family.

According to the relevant keywords, the result of the frequency analysis was that 'poverty' was the highest with 2459, followed by 'education institution' (2396), 'parents' (1936), 'income support' (1353), 'teachers' (1188), and 'care' (1067). In addition to keywords, a variety of other keywords were also gathered. The top-200 included playing, development retardation, emotion, rights, child abuse, learning gap, obesity, remote learning, playgrounds, growth impediment, children policy, child benefits, and disaster relief, etc. As such, it was shown that COVID-19 had a significant impact on the rights of children, and there were many current issues surrounding children's rights. Within the issues related to children's rights, it was also shown that many changes are happening in terms of child poverty, parents, livelihood, development, emotion, nutrition, obesity, learning, playing, participation, and policies, etc.

Second, the researcher used Ucinet ver 6.716 and NetDraw ver 2.173 to conduct a keyword network analysis on COVID-19 and children's rights. For this analysis, the researcher used the results of the frequency analysis of the words extracted to designate top-200 nodes, which were then used to prepare a 200 × 200 1-mode matrix data set (Figure 1).

The result of the keyword network analysis was as shown in Figure 1. The degree centrality of the keyword network analysis was 'poverty' (0.032), 'education institution' (0.030), 'parents' (0.027), 'teachers' (0.021), 'income support' (0.018), 'child care' (0.016), 'child-rearing' (0.015), 'care' (0.014), 'online learning' (0.011), and 'child welfare' (0.011).



## DISCUSSIONS

COVID-19 had a significant impact on children's rights. After COVID-19, there has been a significant amount of effort for the details related to securing the rights of the children across the world.

To secure such rights for children, many international organizations, including the United Nations, are preparing and implementing reports and guidelines for children's rights. And, each nation continues with its efforts to secure the rights of children. Firstly, for the survival and protection of children, the State of New York decided to designate a proxy guardian who shall take the roles of the parents and provide child care services if the children of low-income families must be separated from their parents because their parents were confirmed with COVID-19 cases or hospitalized [7]. To provide financial reliefs to those who were affected by COVID-19, the US federal government has introduced the Coronavirus Aid, Relief, and Economic Security Act since March [8-11]. Also, with regard to the mental health of the children, the Journal of the American Academy of Child and Adolescent Psychiatry warned that the social isolation due to COVID-19 might affect the mental health of children (depression and anxiety), of which the effect may last for almost a decade. Marking these words, the UK and the US governments are now running 24-hour online consultation and help-lines in operation to provide mental-health-related support [12-14].

It is also necessary to respond to the needs in terms of education, leisure, and playing for the development of children. Even when the school is not fully functioning, the rights of the children to learn must be secured. Therefore, an education system that can cover even the populations in need is dearly needed. The British government is providing a community-level help-line for education and childcare facilities while designating the children in need and critical workers, so that they can use schools and childcare facilities even during school shut-downs [15,16].

Lastly, there is the issue of child abuse, violence, sexual abuse, and exploitation of children. The state governments of the US now provide detailed guidelines for using video-conferences, and they have established systems to allow anonymous reporting online. Also, the federal government is providing a 24-hour domestic violence hotline service and a live-chat service in case the perpetrator is living with the victims [17].

As such, the efforts to protect the rights of the children are ongoing all around the world [18-22].

## CONCLUSION

However, more attention would have to be paid to the protection of children and their rights as they plan their response to and recovery from COVID-19 and such plans must be executed in consideration of the best interest of children.

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