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Summary of Research Papers-04



A Study on the Gender Awareness and Attitude of Youths through Peer Culture (II): Focusing on Digital Contents and Online Culture

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Korean Women's Development Institute

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I . Introduction

1. Purpose

Understanding online culture is important to grasp the peer culture of adolescents in an era when online culture overwhelms offline one. In the reality where various types of online discrimination and hatred are becoming offline phenomena, analyzing youth's online culture from a gender perspective can be essential in enhancing gender equality awareness and identifying related obstacles in our society. In fact, as teenagers use PCs, tablets, and smartphones more often and longer, social network services (SNS) have become an important communication method within their peers. Thus, the risk of exposure to online hatred

and digital sexual violence has been on the increase. Against this backdrop, this study attempted to analyze the phenomena and characteristics of young students' online culture, such as digital contents and relevant interactions, from a gender perspective.

2. Details

There are three main research questions in this study: What activities teenagers perform through those media and what are their implications?; What gender perspectives are included in digital contents that teenagers enjoy watching and how those viewpoints are accepted by teenagers?; How the ecosystem surrounding youths' online culture moves? In other words, this study started with individual youth media activities and then expanded gradually its analysis to the interaction between adolescents and digital contents and the relationship between online market participants and youths' online culture. Based on those questions, the main contents of this study are as follows.

First, it analyzed the current state of youth's media use and its meaning. Re-analysis of existing data on online media activities identified changes and differences according to gender, age group, and time series.

Second, it uncovered, through big data analysis on SNS activities of adolescents, the gendered characteristics and shared contents of SNS activities, in a hope of identifying youth online culture.

Third, it conducted analysis on digital contents mainly enjoyed by teenagers from a gender perspective and examined their perceptions. To this end, the investigation shed light on YouTube, online games, and

webtoon contents, which are most consumed by teenagers from the perspective of gender equality. It also investigated their interactions and reactions to content messages.

Fourth, it performed an investigation on the online market and the online ecological environment of adolescents. It analyzed the processes of production, distribution, and consumption of the digital content market from the perspective of gender equality. On the other hand, this study reviewed policies designed to improve this online environment and examples of various measures in the private sector in detail.

Fifth, based on the above research, it found out policy implications needed for shaping an online culture of gender equality and gender awareness. In order to form a gender-sensitive online culture of adolescents, it proposed steps that the government as well as the private sector can take altogether.

3. Method

This study employed various research methods, including literature research, raw data and big data analysis, digital content analysis, online participation observation, focus group interview (FGI), advisory meetings (including written advice), and domestic and foreign case studies.

Specifically, it conducted the followings:

(1) Literature research was used with various research methods in various fields rather than limited to some areas. However, literature research was intensively attempted in the process of analyzing previous studies on online peer culture of male and female adolescents, collecting

information on domestic and foreign policies and related measures related to youth media use, and exploring gender issues that have occurred in various digital content types and have been changing until recently.

(2) the existing survey data conducted by the government and public institutions were re-analyzed to understand the current status and characteristics of youth's media use, youth's gender consciousness, media literacy competency, and youth harmfulness in the online space.

(3) An big data analysis was attempted on SNS, which is most popular platform types mainly among teenagers. Among various SNS platforms, Twitter was selected owing to availability for users' age and gender information. Twitter data was analyzed focusing on posts of teenagers from January 2019 to June 2021.

(4) In this study, some personal broadcasting(Youtube), games, and webtoon contents that are most popular with teenagers were selected and analyzed using the results of the first-year research which surveyed the most popular contents among youth.

In the case of personal broadcasting(Youtube), a total of 18 contents(Youtube channel) were selected with 10 popular contents for female teenagers and 8 popular contents for male adolescents (excluding duplicates). In the case of games, only 3 games (League of Legends, Overwatch, and Bettle Ground) are commonly most popular among male and female teenagers. Also, in the case of webtoons, two women-oriented works (*Dating Revolution* and *Goddess Advent*) and two men-oriented works (*Self-fighting Study* and *Lookism*) were selected, and two webtoons (*Free Draw* and *Guide for Proper Dating*) which were controbersial that is sexist were selected.

(5) Online field study was conducted only for game contents for more realistic analysis of digital contents. Online field study was mainly monitored on hate speech and sexual harassment of interactions of game users by two male and female game monitors participating for about 2,300 minutes for about 20 days.

(6) Three large-scale FGIs in order to closely grasp the online culture of adolescents in diverse ways: One FGI was conducted on 26 people in 5 groups for the analysis of adolescents' digital daily life; another was performed on a total of 36 people in 6 groups, who were subscribers of popular content (19 YouTube channels, 3 games, and 6 webtoons), all of which are the objects of this study, to analyze how adolescents feel and view popular youth contents; the last was done to understand the ecosystem of digital contents production and distribution on a total of 20 people in 10 groups, who were online contents producers, such as online game producers, webtoon writers, and YouTube creators, and media utility teachers;

(7) Reviews on domestic and international public policy cases related to online activities of children and adolescents. It also shed light on measures of countries, such as the United States, Australia, Germany, and Finland, and UNESCO and other international organizations; and

(8) Three rounds of advisory meeting to collect experts' opinions on the details, direction, and results of the research during the process.

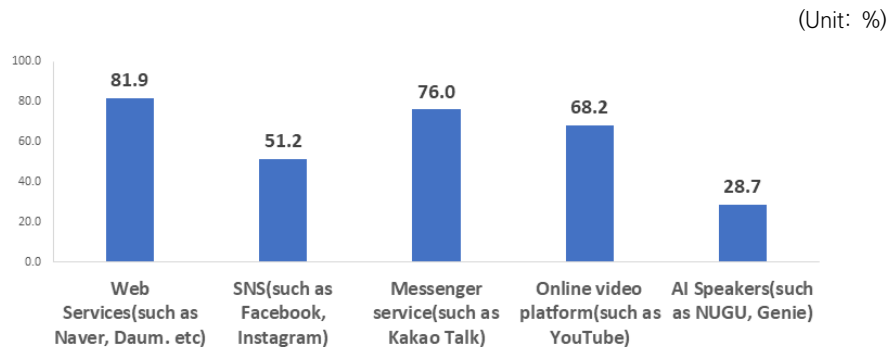
II . Major Findings

1. State of adolescents' media use

With the growing availability of digital devices, not only has the online accessibility of teenagers become greater but also the time of their usage has increased. The closer the relationship between smartphones and adolescents' daily lives gets, the higher becomes the online dependence of adolescents on online. The percentage of respondents who said they had smartphones among mobile phones increased by 13.7%p from 80.3% in 2019 to 94.0% in 2020, and the usage time more than doubled from 73.3 minutes in 2105 to 157.6 minutes in 2020. Not only is this a matter of increasing media usage time, but online life is becoming completely commonplace for teenagers. Currently, teenagers are collecting information through YouTube or SNSs, forming public opinion, and further producing and delivering information directly.

In particular, the closer the relationship between smartphones and youths' daily lives is, the more dependent teenagers get on smartphones. In addition, dependence on the online society, which can only be entered through smartphones, is also increasing. Smartphones, which had been used for pastime or killing time, have taken root in the life of adolescents as are evidenced with phrases, including "smartphone addiction," "online addiction," and "excessive dependence on the Internet." Online dependence can be seen not only from human relationships but also from how important adolescents think about media devices or platforms that provide services to their daily lives. 81.9% and 76.0% of the teenagers surveyed said portal and search engines as well as messenger services

were important, respectively. What this means is that they recognize smartphone platforms (services) are as important as smartphones.



Note: Being important includes ‘Very important’ and ‘Generally important’

Resource: KOREA PRESS FOUNDATION(2019), Tweens’ and Teens’ Media Use in Korea 2019 Re-analysis of raw data.

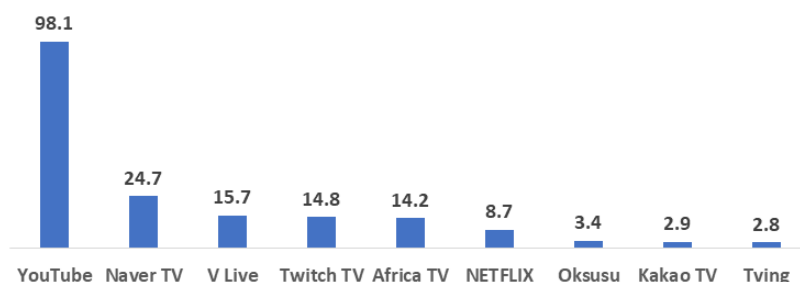
[Figure 1] Level of importance by media

Adolescents show gender differences in their attitude toward ways of enjoying digital contents. Male teenagers generally use online games, while female employ SNSs. In particular, sexist views are often found in game contents, Male teenagers are more tolerant of hate comments during games than female teenagers and have a stronger discriminatory view on female game players. More than a few teenagers are experiencing hateful expressions online, and they are also becoming perpetrators themselves. Particularly, online games are becoming a key medium where in such unacceptable expressions are broadcast in real time.

According to a survey on video platforms used over the past week, 98.1% of respondents said they watched YouTube. This level of response firmly shows that it is deeply enmeshed in teenagers’ lives and even

functions as a network because they share real-time videos and replies with content producers and other sharers. However, in that 85.8% of teenagers said they viewed YouTube's recommended videos, there are risks that platform algorithms may limit users' subjectivity, and eliminate opportunities to access diverse issues provided from various perspectives, which may lead to prejudice or stereotypes.

(Unit: %)

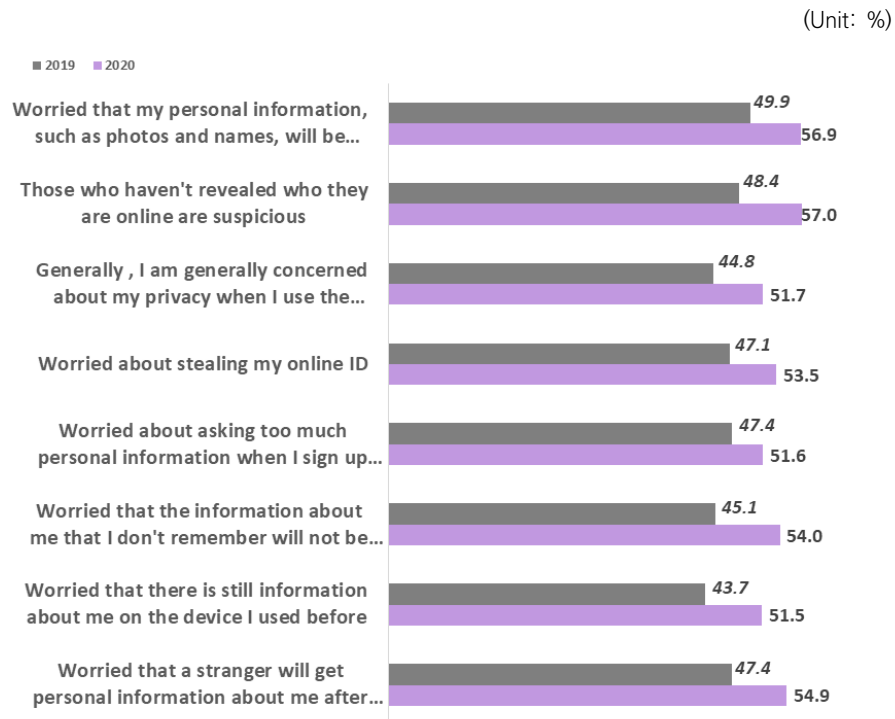


Note: Multiple responses

Resource: KOREA PRESS FOUNDATION(2019), Tweens' and Teens' Media Use in Korea 2019.

[Figure 2] Online video platform used in the past week

Most teenagers seemed to worry about personal information infringement while doing such online activities. Compared with the 2019 survey, all survey questions increased in their positive answers in 2020, particularly about the case where some of their privacy is on the go, without being deleted, in the web (8.9%p), and someone they do not know approach towards them in anonymity (8.6%p). Teenagers are joyfully engaged in online activities anonymously, a characteristic of online space. However, they expressed their concern on the leakage of privacy and the infringement of personal information by strangers.



Note1: Five point grading scale(5=Strongly Agree; 4=Agree; 3=Neither Disagree nor Agree; 2=Disagree; 1=Strongly Disagree)

Note2: Being positive includes 'Strongly Agree' and 'Agree'.

Source: KOREA INFORMATION SOCIETY DEVELOPMENT INSTITUTE(2019, 2020), 2019, 2020 Korean Media Panel Survey Re-analysis of raw data.

[Figure 3] Experience of concern on online privacy infringement (The ratio of Positive)

On the other hand, as adolescents' online activities increase, instances of victimization such as cyberbullying, sexual harassment, gender discrimination, hate speech, and grooming are taking place. Cyberbullying has gradually become more common among female students as more of them are experiencing bullying, harassment, stalking, or sexual harassment more frequently than male adolescents are. In the case of elementary school students, the rate of response regarding

bullying and harassment rose from 0.9% in 2016 to 1.8% in 2020. In addition, more than half, 52% to 57%, of adolescents are highly worried about online personal information infringement. The overall increase in adolescents' use of harmful media is another concern. 71.9% and 33.9% of teenagers are exposed to adult contents through webtoons and web novels, and more than a third of them said that they were not certified as adults, confirming that it is urgent to establish a safety net with which adolescents are kept from access to harmful online contents.

2. Online culture and gender awareness of adolescents

By collecting Twitter posts of teenagers, this study identified the online culture as well as the gender and gender equality consciousness among adolescents. The results are summarized as follows.

First, overall, female adolescents were more active in Twitter posting than male, and they showed greater volatility in Twitter volume than their counterparts did. The number of Twitter postings was 5,484,329¹⁾. Among 4,540,221 of them, 82.8% seemed written by females, with the rest 944,108, 17.2%, by male adolescents; the former overwhelms the latter. Postings related to gender/gender equality issues were 11,231²⁾ in numbers; 8,730, or 77.7%, were by female adolescents and 2,501, or 22.3%, by male adolescents. Girls made Twits 3.5 times more than boys did.

Second, when looking at major keywords related to gender

1) A total of 5,484,329 Twits were studied, which included 36,542 cases where those Twitterers' gender was not specified.

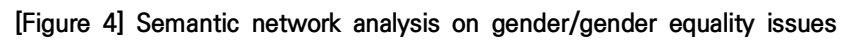
2) Regarding the postings that include gender/gender equality-related keywords, those articles whose author's gender is identifiable were put on analysis.

issues/gender equality, both men and women had high interest in sex crimes. Thus, such keywords that relate to them (offenders, victims, sexual violence and crimes, crimes, etc.) were easy to find, and those words expressing negative emotions or attitudes, including hate, discrimination, yeo-hyeom-min-kuk, a women-hating Korea, and Ilbe, an extreme right wingers, were common. Feminist terms have appeared among both men and women. In the case of women, keywords related to feminism or female-orientation, such as Womad, Corset, and women's human rights, appeared at the top, while in the case of men, those terms criticizing feminism, including kolfemi, a derogatory term on feminism, ranked atop. In addition, keywords that were presumed to contain controversial issues within Twitter feminism, such as sexual minorities and transgenders, were also found in both men and women.

Third, Semantic Network Analysis found the followings: boycotts of the products made by misogyny-related firms; criticism of sexist online content characters; anti-corset as a practice to change the gender-discriminatory society; debate on the relationship related to feminism and sexual minority issues; tension and conflict over feminist issues in school life and friendship; hashtag movements that called for stronger punishment to sexual violence and other crimes reported by media outlets.

The G8 group, which contains the most words, consists of a network centered on misogyny, feminist, and Twitter friend introduction. It is also linked to keywords of the G3 group, which are related to intimate relationships that break up gender dichotomy, such as transgender, queer, gender, and sexual identity. This indicates that the related debate is

becoming an important concern over gender/gender inequality. On the other hand, feminists are strongly linked to the G4 group, which includes keywords concerned with the issue of misogyny or gender discrimination, showing that Twitter is becoming a place for youth feminists. In addition, the G4 group is related to another hashtag movement that publicizes various sexual assault cases around the word “all attack.”



In order to examine the online culture and gender consciousness of teenagers, an FGI (26 people in 5 groups) was conducted on teenagers.

As a result, we found that the online game culture of male adolescents is very essential for them to maintain friendships, and due to the characteristics of the game, teamwork and aggressiveness, the culture in which players swear while playing is not only widely accepted by them but also quite familiar to them.

Second, it was found that there was a difference in the perception of gender equality between male and female adolescents. Female adolescents still perceived the Korean society as being sexist; although there had been some improvements, they were still worried about violence. On the other hand, male adolescents felt that gender discrimination was a thing of the past; instead, they thought it was men who are currently discriminated against because of policies they saw as preferential to women.

Third, we found that there was a gap in understanding feminism between male and female youths. Female adolescents generally thought favorably of feminism. They felt it was unfair to view feminism as hatred of men, and they had a critical stance regarding extreme female supremacist views. On the other hand, male adolescents perceived feminism as emotion-based aversion (misandry, female supremacy) and had a culture of deriding feminism.

Fourth, this difference in perception of feminism among male and female youths seems to be the result of indiscriminate acquisition of such information that is anonymously created and shared in online spaces segregated by gender. Most teenagers get information about feminism

from YouTube, and female teenagers are highly dependent on online information.

Finally, we found that school education, which can provide an opportunity to establish equal and democratic relationships in such situations, was not functioning properly.

3. Gender analysis on popular contents among adolescents

Based on the results of the survey collected in the first year's study conducted in 2020, this study attempted to analyze gender perspectives on popular youth contents in the areas of YouTube, online games and webtoons.

A. Personal broadcasting

For personal broadcasting, the details and format of contents, thumbnails, and comments were analyzed centering on popular YouTube contents within the past three years, and an FGI was conducted on a total of 12 adolescents, six males and six females, who subscribed to them. The result of this investigation is as follows:

First, regardless of gender, the contents that adolescents watch with high frequency were identified as online games and humor. The specificity of peer culture, which can be grasped with these facts, is that online games have a weightier importance among adolescents. Above all, various interests of adolescents according to the personalized media environment, such games and humors, are becoming a reference to the commonality or contemporaneous life of peer play and culture of



a reproduction of the existing gendered culture and peer relationships. From the point of watching, it seems that certain channels are subscribed through past choices, which was already done on a gender basis, and this choice continues to be sustained and extended by the recommendation algorithm.

Algorithms and friends, among others, are main reasons. This is my personal idea. (B12, male)

Fourth, the pleasure of subscribing to personal broadcasting content or one of the main factors influencing the subscription has been creating a difference in gender preference depending on whether it was combined with swears, slang, and sexual comments. Female teenagers preferred “clean contents” that do not use those improper languages, but male tended to perceive “clean” as boring.

I think the cleanness of broadcasting also has a big impact. Broadcasters’ speaking habits are followed by male students, together with the ways they talk. I think those are different from what female students flock to. (B2, female)

Throwing curses to each other is one of the fun factors. (B12, male)

Fifth, there was a difference in perception about hate speech, sexual harassment, or disparaging remarks on women between male and female adolescents. There was little critical perception on severe sexual objectification of women on content channels, with most male teenagers expressing them as funny and even attractive, failing to show critical perspectives. On the contrary, female teenagers said that as soon as they hear someone talk about such channels, they change their faces quickly,

give him/her a second thought, and withdraw trust in him/her.

He looks comfortable with cursing or talking. He doesn't seem to care about others and is not shy. (M: Is it fun to watch someone throw curses or talk poorly?) Yes. (B8, male)

I feel disgusted. It's just very improper. I know they are different, but still I do not understand why they like it. (B5, female)

Sixth, in particular, humor channels where male adolescents frequently visit display that those contents consumed as 'joke' or 'play' have a high tendency to be sadistic and discriminatory. In addition, sexual elements and hidden camera formats have been employed very often. There is a serious level of teasing and disparaging culture among male adolescents. What is more, a person who gets angry or sulky in a situation of a joke can be understood as a strange, narrow-minded person. This can also be understood as not masculine in a close relationship.

Seventh, contents of higher rankings of teenagers are rarely created by females, and thus the role of women is also limited. In particular, online game YouTubers are much more likely to be males. Regarding the reason, male YouTubers are understood as they have widely different contents that can be shared with male subscribers, including of military anecdotes.

I think there's a difference because men usually talk about their military experiences. (B5, female)

I think there are a lot of male online game YouTubers. I don't think I've ever seen a female YouTuber who hardly curses and provides trash contents. (B1, female)

In particular, women are often limited to men's dating and sex partners in personal broadcasting contents watched by male teenagers. Or if a woman plays a "soft" online game that subscribers of a somewhat younger age group would like, such as elementary and middle school, or has a good talking skills or an outspoken way of speech, the woman can be understood as another man or "not like a woman." On the other hand, the proportion of female creators is relatively high in contents viewed by female teenagers, and, according to the female teenagers who participated in the study, they have a wide variety of information and knowledge.

As a result, eighth, sexual connotations were frequently used in those contents that many adolescents enjoy, like online games, as if they were just acceptable and not an issue. In addition, among most viewed contents by teenagers, relationships, including dating, are often portrayed as the most interesting and important rather than other various relationships are. This situation seems to shape an environment that makes women to be perceived as sexual objectification.

B. Online game

Content analysis was carried out on related online games, mostly regarding League of Legends, PUBG, Overwatch, popular among both men and women. The characteristics of those games were analyzed, in addition to an FGI conducted on a total of 12 people, evenly comprising male and female teenagers. In addition, online participant observation was performed by two monitoring staff. The analysis results can be summarized as follows.

First, both male and female teenagers underwent uncomfortable experiences, including swears and provocation. With those situations continued, they later became insensitive to them or just did what they were done to others.

First of all, there were about two people who took the lead in speaking out parents-related swears. When I first heard such bad words, I thought I shouldn't talk to them and those who did so were very strange. However, as more and more YouTubers use them, it has spread more widely, and, as a result, it seems that there is no one who has not heard or said bad curses. (C7, male)

In this way, online game users who are not in hold of proper skills, including females, receive more and more indiscriminate swears targeted at their parents. In fact, victimized users filed a lawsuit against the perpetrator for such wrong-doings in the process of playing the game.

Second, online game teams are randomly formed and teamed up with strangers while playing, and those poorly skilled members are taken for granted to be criticized. Team battle is one of the characteristic of an online game and thus any team member's mistake or poor skills can make his/her team lose a game. This is how players take it for granted that they blame a low-skilled game player.

At first, I responded back, and after about a year I felt it nothing and just blocked it. When they asked my parents' names, I asked theirs too. This is a face-to-face response. I don't know why my mom and dad matter there, but anyway when they did so, I answered them. After approximately a year, I became sick and fed of being cursed, I started blocking them. (C11, male)

In online games, they thought that if they lacked skills, those violent and sexist swears should be “accepted.” On top of that, the fact that sexist and violent expressions are common is more problematic. This is because the exposure to those language practices in online games makes young students form distorted perception on gender. Since most of those games reveal a player’s gender when game participants exchange real-time voice chats, it is easy to find an immediate target of attack, and thus women are frequently targeted as an object of attack.

Third, female students are more often criticized or cursed not only because they are not usually good at online games but also because they are just women. In particular, the traditional gender role theory is applied in the cooperation process, and negative evaluation of women’s abilities is used as a basis of cooperation. Most boys thought that female players should take supportive roles and leading roles have to be taken by male.

You know, there are people who act like that. I turn off voice chat and do text chat. When I first played League of Legends, I started it because I thought I could be more sociable with boys and girls. But I was so cursed by them and got so angry, so I quit it. After that, I just turn off the voice chat on Overwatch or other games. When I do not play well, they throw curses at me. They even blame me, if they just do not find me good enough. They just do so recklessly. (C1, female)

For this reason, female teenagers gave up popular online games and played casual games or other games that draw a relatively small number of male players. They are deprived of game choice, simply because of their gender.

I play Overwatch only. In the past, players uttered immoral comments on other player's parents in serious manners. But these days, they rarely do so. I haven't heard those bad words recently. The number of Overwatch users has sharply decreased since 2019. (C5, female)

I believe LoL is a bit worse. I've never been ignored because I have not let them know whether I am a girl or not. (C1, female)

They answered that they could participate in online games only if they endured inconvenience and that reporting this situation did not solve this problem, which they said was why they just tolerated the stress or discomfort they received in the process of playing online games, or chose to move to other games. In addition, they also selected a way to prevent their gender from being revealed when playing the game by selecting a relatively masculine character among game characters, and others.

I was cursed and upset when I played the game, but I got better when I just took sleep. I think they have always done that. I prefer females on Mobile Battlegrounds to males these days. This game has a mobile version, and more women than men are playing on it. Some males look at my profile image and give me good comments. (C3, female)

C. Webtoon

Content analysis was done on six webtoons that were popular among both male and female youths, which showed gender issues or preference difference by gender. The FGI was carried out on 12 male and female students who had subscriptions to webtoons. The selected works are *Self-fighting Study*, *Lookism*, *Dating Revolution*, *Goddess Advent*, *Free Draw*, and *Guide for Proper Dating*, and the analysis on these showed

the following results. The results of analyzing webtoon comments and FGI contents, intended to understand gender equality attitude towards and interaction with webtoon analysis and experiences, are as follows.

First, there was a gender difference in webtoon preference and usage. Both boys and girls enjoy school-related webtoons. But, male teenagers preferred action stories, while female romance.

Women flock to romance, while men enjoy action. (D4, male)

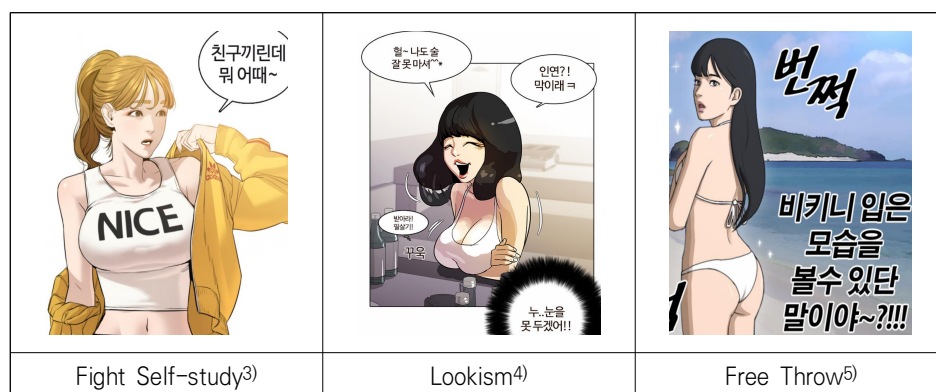
Regarding the way to enjoy, most males played online games or watched YouTube than webtoons, and their recommend their ideas about webtoons to each other. On the other hand, female students spent longer time on webtoons than male students did, being more active in posting comments and sharing experiences with friends.

I only read webtoons at school when I am free. Usually I play soccer or LoL games. I spend my time only on what I like in my extra time. I started reading those web cartoons because of my friend's recommendation. Students do not talk about much about webtoons specifically. (D1, male)

I talk a lot with my friends. In the morning, students coming to school while talking about them, for example, about new releases. My friends and I frequently talk about romance, favoring a handsome, cool, gorgeous, good-natured protagonist. If there is an episode that I like much, I pay KRW 25,000 for subscription and show it to my friends. (D11, female)

Second, the setting of popular webtoon characters among teenagers revealed typicality and obscenity. In particular, all six major female characters were described as devoted to their male partners, together with their good-looking, good body shape, and wealthy family background.

Third, it was analyzed that sexual objectification and condescension of female characters in those webtoons popular among males are easily led to violence against women. Regarding this, the majority of FGI participants think it is okay because it is a cartoon which they read for fun. Most of the female characters in *Fight Self-study*, *Lookism*, and *Free Draw* have big breasts, wide hips and slim waist. Park Ha-neul's attitude, which is repeatedly seen in *Lookism*, is a "service cut" whose intention is to condescend female characters and make females sexual objectification regardless of the story.



[Figure 5] Description of main female characters in popular webtoons among adolescents

Regarding the sensationalism of those female characters, most FGI

3) A scene on Episode 74 of *Fight Self-study* (Apr. 10, 2021) available on Naver webtoon.
<https://comic.naver.com/webtoon/detail?titleId=736277&no=74&weekday=sun> (searched and retrieved: 2021.11.7.)

4) A scene on Episode 11 of *Lookism* (Jan. 29, 2015) available on Naver webtoon.
<https://comic.naver.com/webtoon/detail?titleId=641253&no=11&weekday=fri> (searched and retrieved: 2021.11.7.)

5) A scene on Episode 67 of *Free Throw* (Feb. 20, 2015) available on Naver webtoon.
<https://comic.naver.com/webtoon/detail?titleId=597447&no=70&weekday=sat> (searched and retrieved: 2021.11.7.)

participants saw them acceptable as they are just for fun from cartoons, being not real persons. Female adolescents said that they looked pretty, and one male teenager recognized it acceptable as male readers like suggestive expressions.

People may draw any webtoon that they like, and the body shape and part of human body can be expressed in revealing ways. Those features should be regarded as a medium, and this is well acceptable given that there are many men who like that. (D2, male)

If you look at the best comments on the 30th episode in which a female character is brutally assaulted in “Lookism,” you can find two comments saying that it is exhilarating, while most readers are indifferent to the scene. There is no reply to the comment that it is just cool. But there is a reply that read, “it is not logical to feel sad for the assaulted woman as the man in the story was also beaten.” Consciousness of violence is problematic as it was expressed with “lol.” Popular youth webtoons and responses to comments raise concerns that violence against non-likable characters can be positively accepted. They can be seen as an example that the consciousness of gender violence turns into an issue of gender conflict, failing to make it properly reflected.

Fourth, it was possible to identify gender differences in attitudes toward webtoons based on school violence or the extreme-right Iljin culture. Boys seemed to have already accustomed to the violence of school-related webtoons and thought that it would not be a problem as long as young students did not follow it. In their thought, those stories are action ones and thus should have some violent details. On the other

hand, female students said that they saw some of male students copy webtoons and expressed their concern over the glorification of bullies and perpetrators.

I don't think it is a big problem unless we copy violent behaviors. I believe it'll be okay if you don't do them. (D5, male)

I cannot never ever tolerate those stories that glorify bullying persons and school gangsters. I saw someone do the half kick that appears in the Fight Self-study. (D8, female)

I don't like school violence story. There are a lot of unrealistic webtoons. I think students will follow along. In particular, those who lack to judge which is right or not are more problematic. These are what I'm worried about webtoons. (D10, female)

Fifth, as shown in FGI results, the way that adolescents consume webtoons is out of "Snack Culture"; they tend to underestimate the impact of webtoons on teenagers themselves because they do not choose what they hate at all, or pass over uncomfortable scenes quickly.

I don't think webtoons have any impact on my life. I watch cartoons because I want to watch them. (D4, male)

Sixth, in webtoons, comments function as a major tool for interaction between writers and readers and among readers. Those readers read stories or write comments on webtoons. For their part, writers also check readers' comments, while leaving replies to comments and modifying story lines of their works.

I think it's one of the fun elements. Writers sometimes give their answers to those questions made in previous episodes, or reflect them in next episodes.
(D2, male)

However, there are not only pleasant experiences with comments. There was also a tendency to show considerable resistance to comments that asked not to say certain contents or to exclude characters and other comments that were bombarded with unrelated contents. In particular, most teenagers who participated in the FGI emphasized that there is a limit managed by cleanbots at present, and they noted that stronger management is in need.

4. Analysis of the production and distribution environment of digital contents for youths

Adolescents do not lead consumption in the online market because of their poor spending power; rather, they are influenced by mainstream online culture. In the recognition of the need to understand the production of digital contents and the provision of platforms, this study conducted in-depth interviews with content creators, including game producers, YouTube creators, and webtoon authors and experts on the production and distribution process of digital contents for youths (20 people in 9 groups). Interview results are summarized as follows:

First, at least for online game companies, teenagers do not come factor significantly in terms of marketing as they cannot consume much, although they do partake in some gameplay. Instead, they serve as promoters themselves because they increase download counts. Thus,

online game companies do not develop new games in consideration of teenagers but adults who can afford their creative works.

Most of the billing comes from the PVP (player vs. player). In order for a player to beat another, the player has to spend money on good equipment. But it's not easy for student players to do that. Online game producers have those in their 20s and 30s rather than 10s even when they make games for teenagers out of their for-profits ego. This makes them find it hard to design online games for younger age groups. (E16)

Second, regarding the reason why those creators frequently employ revealing images and excessively portray the breast and backside of female characters, all of which can be interpreted as an effort for the sexual objectification of women, those males in their 20s and 30s explicitly demand those kinds of details in online games they enjoy, and game companies meet such needs in the hopes of generating revenue. In particular, those elements are more easily found in male-preferred online games. Given that there are no online games created only for male youths, they can infuse them with distorted sexual values.

Usually, they set up a target group. Here, the target means those willing to spend money on game items, which mostly excludes teenagers. Usually online games set people in their 20s and 30s as their target because they spend the most money on them. In the end, it is about making money. For this reason, developers design online games in a way that can make players spend more money, changing details of their products into sexy and obscene things. That's how they do in this industry. (E20)

Third, widespread misogyny, gender discrimination, and sexual harassment occur in online culture, and they also affect production

processes. These are commonly found in male-oriented contents, be it on YouTube, webtoons, and online games. In the case of YouTube, the gender bias of streamers and creators directly influences the sexist online culture. The biggest part of online misogyny is the censorship on producers' ideology. The game industry has already begun censoring voice actors and illustrators, establishing censorship as a mechanism that works for the removal of censored producers from the market. Rather than protecting game creators' personal information and respecting their human rights, they are indiscriminately allow vetos by users to sway decisions. Cyberbullying against webtoon artists is also serious. There are cases in which artists who have nothing to do with feminism are extremely bullied with one line. If the content itself reveals a feminist perspective even a little, it will suffer from rating terrorism and comment terrorism. This reality amplifies the anxiety of artists and restricts their right to express their thoughts freely. Artists are feeling intimidated by this culture and are strengthening self-censorship. And as a result, it results in evaporating the feminist perspective throughout the work.

The so-called Megalia affair that occurred in 2017 and 2018 when an illustrator with feminist ideas drew a rifle illustration on mobile game Girls Frontline. Consumers of this game filed petitions for the illustrator having portrayed an illustration card where a new character carrying the gun. Consumer groups protested a lot. (M: Not because of the problem with the painting, but because of the artist's idea?) Yes. After all, the illustrator was replaced. It's not a character problem but the author's ideas. It was an issue of censorship. (E16)

Fourth, under such circumstances, there is inadequate recourse for the reporting of sexual harassment or hate speech. Since the reporting system

within a platform is subject to corporate autonomy, the standards for handling reported issues vary from company to company. And even a single company has different ways to deal with claims, depending on the game. Also, feedback policies on reported issues are not the same; worse, many claims failed to get even a piece of feedback. As such, users do not feel that reporting is efficacious.

It depends on online game. Rules are different from each other, and this is what needs to be decided. Whether an issue violates the operating guideline or not is judged by game company's management team. Under this situation, issues, like "Come to My Home," can take place. In the end, it is the operating team that determines it. If a person in the team lacks gender sensitivity and he/she put restrictions on misandry but not on misogyny, an issue can arise. (E17)

Fifth, those review boards, which represent the only tool that can properly control producers, are not working well. The Game Rating and Administration Committee, in charge of reviewing online game contents, does not take into account character's acts, lines, descriptions, and other contextual points but just check the level of revealing images of characters. Even worse, mobile games are not subject to the committee's review, so platform companies review them autonomously. This results in disparate review standards by company. Since there are no clear criteria or indicators for review, companies just operate based on their experiences and intuition. In addition, even if they found questionable content, they would not correct it at the expense of time and money. Instead, they change its rating so that adolescents cannot play.

Chances are that they would think, "It is an online game for adults. Who cares?" That's how it plays out. If it was for a minor, they would have thought

differently. People say that's how they do in most adult game companies. They think, "Because of sensationalism, games were classified for those aged 19 and older. For greater coverage, should we change more?" It takes resources to modify them. Developers of the games are to blame. It is the problem of those leaders and developers who didn't take issue with it, but there's no institutional mechanism to make up for it. (E17)

Sixth, the AI-based platform operation acts as a mechanism that encourages the proliferation of hate in online culture and strengthens adolescents' gender discrimination. This phenomenon is particularly serious on YouTube, where content is provided to viewers on the basis of their viewing records. So if you watched hateful contents once or twice, you would be directed to more content of similar nature. In particular, the fact that male youths get feminism-related information from Youtube is behind the strong backlash against feminism. The limitations of AI do not stop there. Even if such contents that underscore human rights and equality display violent elements or get "Dislike" hits from sexists, those contents will receive a "yellow card" and thus be pushed off the recommendation list generated by the AI.

But the problem is that if a video clip violates the guidelines, the video is to be given a yellow mark. And, algorithms do not rank those yellow contents atop. They are pushed back. Furthermore, the sign does not disappear but stay there. If a channel keeps the yellow button on, the channel can face policy restrictions. (E9)

Seventh, gender bias that can be identified in online contents and culture is not irrelevant to the organizational culture of platform companies. Game producers and platform companies, most of which

have started as ventures, are where decision-makers have strong authority and their opinions are bound to be reflected into contents one after another. In companies of games and platforms, the proportion of female directors is extremely low, and most of their staff is men. Even if women are said to take up half of the total head counts in those companies, it is men who assume the positions of executives and programmers, while women participating in customer satisfaction or arts. Jobs in those work places are on gender segregation.

The gender ratio varies from project and job group. The portion of women employees in operation department is higher than that of men. As they care about patrons and tend to empathize with them comfortably, women are usually placed in management teams. In contrast, men are in development. In fact, the gender ratio of employees is not imbalanced throughout the industry. But it varies greatly from job to job, mission to mission, and project to project. The ratio of games are varying depending on gender. It shows different gender ratios for each project or job group. (E17)

Eighth, gender awareness education for creators or platform companies is desperately needed online, but in reality, it is poor or absent. In the case of game companies, sexual harassment education is provided for companies, but most companies conduct it online, so there seems to be no practical educational effect. In the case of webtoons, even this educational system is not prepared. Many writers have fear and anxiety about this part, but no educational opportunities are provided. Accordingly, it is argued that there is a need to provide educational opportunities through agencies or provide education for platform companies.

5. Policy regarding the youth media utilization environment and cases of measures

In relation to the analysis on the online environment of adolescents, this study reviewed domestic and overseas policies related to online activities of children and adolescents, measures taken in the public sector, cases in the educational field, and others. In particular, it explored the state of institutionalization of media literacy education laws at home and abroad and countermeasures against cyber-violence and digital crimes.

A. Domestic Measures

Discussions and current status related to media literacy education in Korea are now in the early stages of learning media technology and utilization by linking digital citizenship and literacy, and emphasizing society participation, empathy, and living together. While tasks such as reflecting the school's official education curriculum and strengthening social media education remain, above all, it is necessary to emphasize the value of diversity and inclusion in education to cultivate digital media literacy.

Media education is very important to solve various problems that are currently happening on the Internet. It can be said that it is time for discussions on including social justice, anti-discrimination, and a sense of gender equality to begin in how to organize the contents of media education. Referring to overseas cases, it is necessary to propose an anti-discrimination perspective on domestic school media education and various public institutions, such as UNESCO including diversity modules including gender equality among the modules of the media information

literacy education curriculum.

In addition to media literacy education, efforts are also needed to deal with, solve, and come up with countermeasures in online space, such as countermeasures in the event of actual cyberbullying. It was not until 2012 that schools recognized the problem of violence in online space and reflected it legally and systematically. After the revision of the School Violence Prevention Act, cyber bullying was defined as a type of school violence, and it became an opportunity to recognize the problems of online space that were not recognized in the past as problems in schools. However, there are still limitations in terms of specialized technologies that can deal with cyberspace problems or expanding the scope out of schools.

In the case of digital sexual violence response, the inclusion of digital grooming in the 2021 revision to protect youth is a big step forward. As the issue of sexual exploitation of children and adolescents in online spaces becomes a serious social problem and the main victims in Telegram sexual exploitation cases appear as female teenagers, it is progressing through the revision of the law on sexual protection of children and adolescents in 2021. Due to the revised law, not only punishment of acts such as sexual conversation to children and adolescents through information and communication networks for sexual exploitation, but also video synthesis problems including deepfake crimes are punishable. In addition, the digital sexual violence damage support system does not distinguish adults from adolescents, and the Digital Sexual Crime Victim Support Center established in 2018 provides various supports for deletion and monitoring of damage photographs,

investigation-linked support, psychological counseling, legal support, and medical care.

In the case of digital sexual violence, legal and institutional progress is considerable, and attempts have continued to provide specialized help to adolescents, including the education office's move to enact ordinances, over the past year. Along with these legal and institutional movements, the perception of digital sexual violence in online space is already treated as a kind of play culture, and the problem that women's bodies are presented as sexual images suggests that efforts should be made to change perceptions in the educational field and active regulatory intervention on online culture.

On the other hand, civic groups tend to actively utilize the paradigm of youth protection while approaching cyberbullying as an Internet ethics issue. In the early days, cyberbullying was viewed as Internet verbal abuse and organized by checking one's expression, so they tended to approach it in terms of pornography, verbal abuse problems, and ethical dimensions. This approach tends to continue to this day, but in addition, digital citizenship education is emphasized as an important consciousness. Therefore, in the future, it is believed that in Korea, attempts to combine social discrimination and structural problems within the recognition of cyberbullying response as well as such approach in terms of personality development or personal ethics are necessary.

In addition to education and legal and institutional countermeasures, various cases were reviewed to improve an online culture of gender equality for adolescents. In particular, since Korea has not attempted self-regulation or online culture focusing only on gender equality, the

regulations on discrimination has been comprehensively reviewed. First of all, it was confirmed that the measures to social media problems are generally approached in terms of Internet ethic issues and self-regulation rather than gender equality issues.

Korea's leading self-regulatory organization, KISO (Korea Internet Autonomous Policy Organization) as well as domestic platform operators Naver, Kakao, and Africa TV are implementing the self-regulation with the top priority in blocking harmful content such as KISO's Internet guidelines, Naver's child and youth protection measures and clean bot system operation, Kakao's declaration of zero tolerance related to child and youth sex crimes, Kakao's declaration of principle to eradicate hate speech, and Africa TV's self-regulation. Compared to the previous passive appearance of domestic platforms in eradicating hate expressions, these self-regulation has recently been evaluated as a positive change, such as strengthening provisions related to child and youth protection and emphasizing awareness of discrimination. However, it is pointed out as a limitation that it can be reported only when it is recognized as an pornography first, and that it is expressed as regulating dispute activities, not regulating discrimination, and gender is not considered a target of discrimination. Therefore, it is necessary to check how each provision treats gender equality and regulates discriminatory expressions when they are actually used.

Self-regulation in the game industry generally focuses on gambling item regulation, that is, youth protection in the payment system to secure probabilistic items, and focuses on youth protection and pornographic game advertisement issues. It can be said that the perception of

self-regulation related to gender equality in the game industry is still insufficient. Regulations on hate expression by game companies remain automatic filtering based on AI, and although it has been a long time since the issue of sexist hate expression using game chat has been raised, it is treated as a simple curse regulation, and discussions on misogyny culture in the game are not included in the context of self-regulation. Efforts to transform paradigms of game literacy have recently been underway, and it is necessary to emphasize the introduction of a gender equality perspective in such attempts.

B. Foreign Measures

The cases of measures by overseas countries are mainly aimed at examining the policies of foreign countries on media education for teenagers, cyberbullying and hate expressions, and the cases of self-regulation of leading companies abroad.

1) Media Education Policies for Youth

Regarding youth digital media literacy education, UNESCO aims to support international media information literacy (MIL) education by developing a media literacy curriculum, presenting guidelines, and competency resources such as a framework for evaluation. Accordingly, annual reports and research materials are disclosed every year and the curriculum is provided online. It has been found that it constitutes a global network of elementary, middle, and high school curriculum as well as university curriculum, and provides curriculum through social media beyond traditional media, such as the MIL CLICKS Social Media

Initiative.

In the case of the United States, media literacy continues to be included in the regular curriculum in each state. As of 2020, 14 states are required to educate media literacy or legalize the composition of curriculum. In particular, as fake news has become a social problem since the mid-2010s, it deeply reflects the view that it should develop judgment on media information from childhood.

Australia has a long history of applying media education in the school curriculum. It is reflected in the first and second curriculum and is treated as an area of English education or art education. English is provided in multi-literacy perspective and art education is provided as a media art subject. Australian media literacy education is characterized by emphasizing the dimension of social inequality by reflecting the characteristics of multiculturalism.

The characteristic of German school media education is that it is led by the state due to a federal state system, and that Landesmedienanstalt is in charge of media education-related laws and institutionalization. Under this delivery system, Germany's media literacy education should be discussed in all subjects, not a separate subject, allowing students to access media education as early as possible. Accordingly, digital technology programming is learned early and education is provided to respond to social change by inducing interest in mathematics and engineering.

Finland defined the concept of 'multi-literacy' as a core competency through the revision of the national core curriculum in 2014. The need for a media literacy policy was emphasized once again in 2018, and the

improvement of technical capabilities to eliminate media and digital illiteracy was included in Finland's national curriculum. Literacy education in Finland is conducted in three stages, with the first stage being to express one's words, the second stage producing news, and the third stage being to attempt comparative analysis for critical thinking .

Upon examining youth digital media literacy education in foreign countries, the implications can be summarized as follows. First, in many countries, media education is mandated to be included in regular curricula or operated as part of subjects. In the United States, Australia, Finland, and Germany, education departments and media departments are actively intervening in them. Second, many countries cite the changes in the digital media environment as the context of strengthening media literacy education. In particular, the issue of fake news has motivated the strengthening of media literacy in the United States and Finland since the mid-2010s, which therefore requests direct legislation or policy reinforcement. Third, the media education curriculum saw participation by various educational institutions and civic groups that have been monitoring and producing legacy media for years. Fourth, various tool kits related to media education were provided by civic groups and educational institutions. It seems more important to evaluate and utilize the context significance of each educational curriculum and program than to have a unified plan. Fifth, as plainly shown in the case of Australia, it is necessary to benchmark those cases where broadcasting companies actively work with media literacy education associations and steering committees not only to provide media education programs and content but also to enhance the effectiveness of literacy education through

collaboration. Sixth, values such as diversity and gender equality in relation to digital media literacy may be emphasized in the context of the multicultural / multi-ethnic society, as found in Australia and the United States, and may be explained through comprehensive contexts, including digital democracy, as in Germany and Finland. Therefore, in terms of digital media literacy, discussions will be necessary regarding how to engage issues of gender equality values, diversity, and inclusivity in civic-related approaches.

The following points can be noted in overseas cases of self-regulation. First, there is a strategic approach that actively promotes gender equality values, diversity, and inclusivity from the viewpoint of companies. In particular, given that only recently have Korean companies begun to show interest in value management, many businesses related to media platforms need to demand that the values of gender equality and diversity are to be included in online games. Second, the context for realizing gender equality and the value of diversity is reflected from the perspective of social structure, including the prohibition of discrimination. This can be said to have great implications for Korea, where anti-discrimination legislation is still pending. Third, a growing number of observers have commented Korea needs stronger measures to protect children and adolescents. Reinforcements to the legal system naturally occur when digital sex crimes and various harassment problems against children increase. In relation to this, it is particularly noteworthy to check the cases of the United States and Australia. Fourth, from the perspective of corporate responsibility, interest in effective and practical measures, rather than simple countermeasures against harmful contents,

are occurring. This presents a task regarding how to address the current the situation where platform companies include harmful contents to benefit more, which is a question that goes beyond the simple removal or limiting access to certain harmful contents. Therefore, the above findings imply the need for discussions not only for international connection and cooperation for practical solution but also for determining whether or not to put simply treat them as matters for autonomous self-regulation.

2) Measures against cyberbullying and hate speech

Looking at overseas responses for cyberbullying and digital safety, first of all, in the case of the United States, the United States is generally declaring a strong response to school cyberbullying, such as punishment of perpetrators, through legislation. Violence prevention education programs are generally programs that emphasize violence prevention in school education, and are progressing to the extent that cyberbullying provisions are added to traditional school violence programs. Regarding cyberbullying, it can be seen that there is a growing tendency to emphasize firm stand on the issue and zero tolerance policies. In addition, discussions on online safety of adolescents are being conducted in connection with serious crimes such as kidnapping, grooming sex crimes, and sex dating.

Although the legal limitations of cyberbullying vary from state to state in Australia, the overall legislation dealing with online safety for children and adolescents is “Enhancing Online Safety Act 2015”. Under the law, an online safety committee for children was launched, and through social

network services, it is the basis for legal responsibility, liability for compensation, and investigation and crackdown on sex crimes targeting children.

Germany is taking actions on cyberbullying through the 2nd Cybermoving Congress in 2016. The biggest feature of the German legislation is a bill that can regulate platform service providers and mandates platform operators to delete 21 types of illegal information (including hate expressions) stipulated in the criminal law based on user reports. As such, one of the characteristics of Germany can be said to be the strength of the social media regulation bill.

What is noteworthy in the case of Finland is that hate expression, cyberbullying prohibition, and anti-discrimination laws are linked, and regulatory measures are organized through recognition of how the problems experienced by children and adolescents in the online environment are related to social structure. Accordingly, the Gender Equality Act is also used as a basis for regulating hate expressions, and accordingly, there is a legal basis for dealing with hate expressions online, and in Finland, hate crimes and hate expression problems.

Regarding the project to realize gender equality in the game sector, the US case is noteworthy. This is because the efforts of American companies in the area of self-regulation are relatively active. On January 27, 2018, Blizzard of the U.S. released three countermeasures and self-regulation contents on YouTube, and Blizzard presented a report on the perpetrator, a warning against voice chat by the perpetrator, and a notice of malicious chat report as a self-regulation plan. Meanwhile, Blizzard is holding a women's game camp to foster female gamers and

create a women-friendly game culture. However, despite these efforts, there have been cases in which gender discrimination and sexual harassment problems in Blizzard have recently emerged, and restrictions have been imposed such as banning entries for the 2021 Game Awards. Due to such examples, the importance of gender equality within the organization of game developers has been raised as well as changes in the game user culture. Google also launched the campaign Change the Game for female users in 2017, saying it would respect various values such as women and sexual minorities, not just in a male-centered game culture, and suggested fostering female game makers as the purpose of the campaign. The EU is proposing self-regulation related to social media platforms. The European Commission launched the Code of Conduct, proposed by the EU, is a self-regulatory guideline signed in 2016 with Facebook, Microsoft, Twitter and YouTube.

YouTube provides policy guidance and reporting pages on its website, and presents YouTube's 11 key principles, Community Guide. In addition, kids under the age of 13 are not allowed to create accounts, and safe search functions prevent harmful content from being exposed to minors. In addition, a new child and youth protection policy was announced in 2021, and the video of users aged 13-17 was set as a private default to reduce the youth's pain by immediately disclosing their appearance.

III. Suggestions for improvement

Putting all these findings together, this study aims to come up with several policy implications for youths to enhance gender equality consciousness and gender sensitivity while they enjoy digital contents and online culture as well as to shape a gender-equal youth culture that encompasses the online realm.

First, it is necessary to expand media literacy education. To this end, it is worth bringing to attention the UNESCO's educational module that presents those values related to gender equality and to set up women and minority empowerment as active educational paradigms and specific educational contents. Based on this, this study emphasizes media literacy education in the curriculum as a way to strengthen this in school education, secure learning hours and prepare guidelines for it to be actively implemented, and strengthen digital media literacy training for teachers to deliver effective education. In addition, in the course of conducting media literacy education, there should be not only protective policies for teachers but also legal and institutional foundations for stable implementation of the material. It is necessary to emphasize this not only in school education but also in the areas of youth activities. Adolescents need to take the lead in monitoring and transforming their online culture. It will also be necessary to highlight or support media competency activities within various youth support programs.

Second, the system and support for the youth online environment should be strengthened. To this end, greater support for the production of gender-sensitive contents and of legal advice for creators should be

provided. Also, other venues of support must be offered that can heighten the gender sensitivity of creators and systemize relevant education, so as to shape an environment where gender-sensitive contents can be produced. Adding to that, talks about drafting an anti-discrimination act, as a tool for autonomous regulation and its foundation, need to be initiated so that online segregation and hatred are perceived as not individual irregularities but systematic discrimination, in consideration of the rapidly changing online environment. Legal and institutional devices should be prepared in a way that diversifies details of regulations, including including the prevention of children and youth creators from producing adult contents.

Third, there is a need to further activate the autonomous regulation among corporations and the monitoring role of civil society. Since regulations on digital content are closely intertwined with the freedom of expression, there are limitations in the details and method of regulation. Therefore, in order to create a gender-equal online culture, platform companies themselves must approach the issue with a greater degree of civic consciousness. It is therefore required that platform companies need to establish reviewing standards that follows higher ethical standards, and to disclose them to both producers and consumers. In addition, efforts should be made in order to ascertain how contents influence adolescents and other users, in addition to accepting technical accountability should the need arise. In particular, active technical intervention is required for algorithm-based recommendation and the rating / review of contents. Also, efforts are needed to realize a gender-equal organizational culture by companies themselves, such as

removing discrimination against women's promotion in their organizations and actively tackling sexual harassment culture. However, the most important thing is that civil society should work with active vigilance in monitoring where or not a gender-equal online culture is in place. It will be a top priority to establish set in motion a virtuous cycle where civic groups aggressively monitor media activities, which are in turn supplemented with corrective institutional measures.

