Teacher's perspectives on challenges in educational environment of public schools during the COVID-19 pandemic: A qualitative study in South Korea[*]

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The COVID-19 pandemic has resulted in an increase in psychological distress, burnout, and workloads among public school teachers. This study aimed to explore the teachers' experiences regarding the impact of the pandemic on their mental health and burnout. Nine teachers who were currently working in public schools in Seoul, South korea were invited to participate in focus group interviews (FGI). Data from FGIs were combined and analyzed thematically. The open codes were grouped and categorized by identifying and classifying the overlapping concepts into focused codes, which were then conceptualized into sub-themes and final themes. The analysis revealed three main themes of the COVID-19 pandemic-related challenges across public schools in Seoul. 1) Schools have no vitality; 2) Online classes are energy-consuming; and 3) Teachers are vulnerable middlemen. The results of this study offer insight into teachers' perceptions of the unique position in which they are in to support students and their parents during the COVID-19 pandemic. Limitations of the study and implications for future research were also discussed.

Key words: COVID-19, public schools, education, online teaching, self-diagnosis, learning gap

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Since the novel coronavirus was discovered in China in 2019, COVID-19 rapidly spread worldwide, causing a global pandemic (World Health Organization, 2020). Its repercussions range far and wide, affecting people's day-to-day lives, interpersonal relationships and international relations, causing severe problems for businesses, the tourism industry, and healthcare. Concerned about infection, many have quarantined themselves, leading to psychological distress caused by social isolation (Kim & Jung, 2021). Amid the COVID-19 pandemic, the school environment has also been disrupted (Bahn, 2020). The first school shutdown was in the United States on February 27, 2020 (Education week, 2020). As the virus spread, most governments across the globe temporarily closed schools or educational institutions to help contain the growing number of confirmed COVID-19 patients. Indeed, the educational environment changed so rapidly during the pandemic that globally, over 90% of the ministries of education enacted measures to provide remote learning through digital media and broadcasts, even though at least 31% of students could not access such remote learning programs (Unicef, 2020).

In South Korea, the first day of the 2020 academic year was delayed from March 1st to the middle of May (Yoon, Kim, Park, Kim, & Kim, 2020). Upon school opening, each class was divided into two groups that attended the school on different days. Teachers not trained in dealing with infectious diseases had to play a role in preventing COVID-19 from spreading, by monitoring students' temperatures, rating their suspected symptoms, and supervising their mask-wearing on a daily basis. These duties imposed a severe burden on teachers when students attended their schools in person. When schools were closed, teachers had to quickly switch to online education to reach students outside the class. Consequently, checking students' health conditions and supervising preventive measures at school while also executing all educational procedures online placed immense pressure on teachers. Despite their best efforts, school closures negatively impacted students' experiences and academic performance. While students stayed at home, working mothers, especially single parents and those from low-income families, faced additional obstacles (Bahn, 2020), because they could not stay at home to take care of their children. In addition, some students could not prepare for online study that requires electronic devices such as laptops, tablet PCs, or smartphones because they did not have such devices. In short, the online educational process was a burden on all its participants: the teachers, students, and parents.

Amid the COVID-19 pandemic, healthcare workers, government officials, and educators who provide essential services suffer from psychological distress and burnout in their profession. They need to be wary of being infected and spreading the virus both to their family members and co-workers. In light of the situation, we explore and describe the challenges that South Korean public-school teachers experience during the COVID-19 pandemic.

Methods

Research Design and Participants

This study employed thematic analysis to discover patterns and themes from the focus group interview (FGI) data obtained from public education teachers in Seoul, South Korea. Specifically, we asked about their experiences, especially the difficulties they have experienced in the school environment during the COVID-19 pandemic. Commissioned by the Korea Research Foundation to conduct research and develop psychological preventive programs, this study was reviewed and approved by the Institutional Review Board of the institution to which the authors belong.

Our research team created a poster on how to attend the interview, subject of the interview, our research description, and why their perspective is important, and copies of the poster were circulated through a teacher network. Once potential participants completed a brief survey on their qualifications to join the study, a researcher contacted those who satisfied the requirements and confirmed whether they could participate in person in a group interview. The FGI participants were confined to be public education teachers working (at the time of the interview) from an elementary to high school in Seoul, and with more than three years of teaching experience. The FGI participants finally collected for this study comprised four elementary teachers, four high school teachers, and one counselor from the National Counseling Services for Students. The counselor was included for a more in-depth understanding of students' psychological difficulties, as such counselors work in public schools and counsel attending students on their mental difficulties. The participants were compensated with a gift of 90 USD (Table 1).

Table 1. The Interview Participants

August 11, 2020; five teachers attended	H2 (High, 11 years)	40-year-old female
	H5 (High, 2 years)	39-year-old female
	E1 (Elementary, 5 years)	27-year-old female
	E5 (Elementary, 2 years)	26-year-old female
	E3 (Elementary, 11 years)	49-year-old female
August 13, 2020; four teachers attended	W1 (WEE, 2 years)	29-year-old male
	H1 (High, 4 years)	30-year-old male
	H3 (High, 8 years)	37-year-old female
	E2 (Elementary, 8 years)	30-year-old female

Table 1. The interview participants

Prior to the FGI meetings, one-on-one pilot interviews with three public school teachers were conducted via telephone to prepare the FGI's outline based on rough ideas on the current public-school conditions; from this outline, semi-structured interview questions were drafted. The participants were asked to share their thoughts (difficulties) about preventive COVID-19 measures, classes, student management, self-management, and national support.

Data Collection and Analysis

In the process of scheduling FGIs by telephone, we discussed with potential participants the study's significance and purpose. In FGIs characterized by discussion, participants can express a variety of perspectives on similar experiences(Glesne, 2016). Our team agreed that two sessions of approximately five participants for roughly 90 minutes would yield the appropriate amount of data. The nine participants were divided into two groups at their convenience, thereby allowing their in-depth participation in a smaller group. The first FGI comprising five teachers was held on August 11, 2020, and the second on August 13, 2020, comprising four teachers, with each FGI spanning 90‐120 minutes. Two interviewers participated in FGI. One was a certified clinical psychologist with a Ph.D. in psychology and the other was with a doctorate in Education. The interviewers moderated the FGIs, while another researcher with a master's degree in psychology provided assistance. The FGIs were audio- and video-recorded and kept confidential. The participants signed a consent form and were allowed to withdraw at any time. Drinks and snacks were provided. The participants used their chosen pseudonyms and wore masks for protection against COVID-19.

The three researchers transcribed and cross-checked the recordings of the data from the two FGIs; then the data were combined for analysis and coded by one researcher to maintain consistency, using thematic analysis. Afterward, our team shared and discussed the coded output several times for verification until we reached a consensus, in order to obtain validity.

More specifically, the researchers repeatedly read the interview transcripts to obtain a holistic view of the discussions and then made line-by-line manual annotations in the margins. Initial coding was done twice, first, manually through a color-coding technique (Creswell, 2009) and then through an NVIVO (a qualitative data computer analysis software) trial. The codes from these two analyses were compared and merged into a final version to increase validity, resulting in 76 open codes, 16 focused codes, 8 sub-themes, and 3 final themes. The open codes were grouped and classified by re-categorizing overlapping concepts into focused codes (Braun & Clarke, 2013), which were once again conceptualized as sub-themes and final themes.

Results

The FGIs with nine public education teachers generated three final themes: "Schools have no
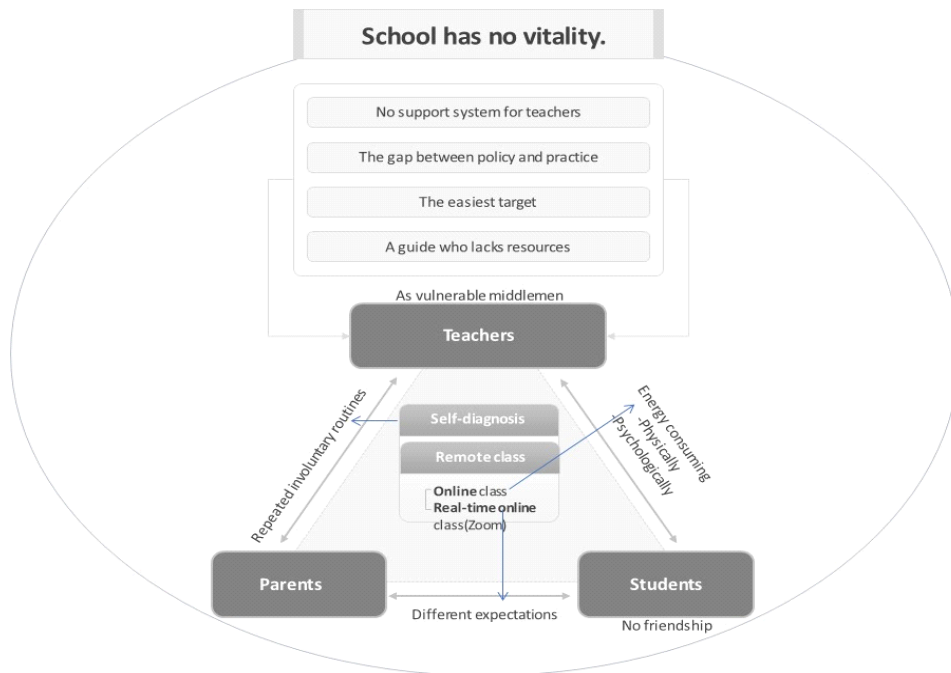
Figure1. The Concept Map Showing the Three Themes about the Changes in School in COVID-19

vitality," "Online classes are energy-consuming," and "Teachers are vulnerable middlemen." Although "Schools have no vitality" is one of the three themes, it was also considered as the overarching theme (Figure 1).

Theme 1: Schools have no vitality

The theme "Schools have no vitality" was constituted by two sub-themes: "Repeated involuntary routines" and "School without friendship." All participants agreed that when classes were held in person, students felt cheerless and bored, mainly because social distancing was strictly maintained, causing the school community's atmosphere to become silent, tense, and passive.

Sub-Theme 1.1: Repeated involuntary routines

This sub-theme was supported by three categories in the self-diagnosis system: "a pain in the neck for parents," "meaningless but to protect teachers themselves," and "avoiding administrative responsibility." These three categories covered all the inconveniences for parents and teachers stemming from the self-diagnosis application created and distributed by the Ministry of Education. All South Korean students were supposed to check their temperature and symptoms every morning and input the information into a smartphone application. Homeroom teachers checked the students' updates and guided both the students and parents when an abnormal symptom was observed. Students with clinical symptoms of COVID-19 were required to visit selected clinics

Table 2. The Participants' Responses to "What Difficulties Have Public School Teachers Experienced during the COVID-19 Pandemic?"

Themes	Subthemes	Quotations
1. Schools have no vitality.	1.1. Repeated involuntary routines	"Self-diagnosis is required every morning for 20 minutes before 8 am, but our school district has many working mothers…" "We (teachers) wait for parents' replies for about 30 minutes. On remote learning days, we send a text message requiring a reply through a push, but from the parent's perspective, this might feel like we are coercing them. They might feel annoyed when receiving texts asking them to follow instructions every morning…Sometimes we call parents again and again, and if they don't answer, they continue to get hassled." "Sometimes students just come straight up to the classroom. When they just come in, it's hard to send them back downstairs to check for symptoms. When that happens, I need to take the student down to check the temperature myself without letting anyone know, or I should communicate with someone downstairs. But that kind of manual procedure is not organized systematically…" "When a student clicks 'headache' as his/her symptom in the self-diagnosis application, a warning 'Don't go to school' pops up. Then we have to call him and ask if it's a light common headache, or if it's because of a fever. I think the whole procedure is meaningless." "In elementary school, parents have to assist their children with self-diagnosis; but when both parents work, they are busy in the morning. As teachers, we are not happy to urge them. In my school, teachers have to call the parents by 10 am by phone…. Sometimes, I couldn't do it and let it pass. As these things are repeated, I just think 'let's just avoid taking responsibility'… Although many parents don't do it even after checking out my message, I feel safe from being blamed afterward. I feel like I am just doing my homework." "All this stemmed from the self-diagnosis system. The reason why homeroom teachers are the final people to wrap up the test is that a school nurse has to report to the Office of Education after collating all the results from homeroom teachers. But if the information is not collated from the homeroom teachers, the school nurse has to take responsibility, and teachers assigned in the health department are also responsible for that. If the report was not made at the school level, the Office of Education reproaches those schools for incomplete reporting." "If you miss filtering out a confirmed case, the responsibility is primarily assigned to the field personnel, and no one can compensate you for that. I think it's more important to check it consciously."
	1.2. School without friendship	"We are not allowed to conduct group activities in class, so it has to be changed to a lecture-style approach…Teachers need to explain everything instead of the students participating in group activities …Students feel bored, and the class is not interesting." "It's all about theories in online classes, while students are evaluated based on their performance during in-person classes… Students say that they feel like they come to school for performance tests…I think the method of evaluation is forced in such a way that it is boring and rigid…In the given conditions, there's no other way to improve when we have no other choice." "The class is divided into half and teachers teach the same things twice. When students come to class, their desks are placed at some distance from each other…There's nothing they can do during recess. Each class is instructed to use different routes to the restrooms, and only two students are allowed to go to the restroom at a time, so that they cannot meet up with other students there…It seems that friendship cannot be formed well. First of all, they all wear masks and are not allowed to talk to each other.

		"There's no group activity in class, either··· Students are seated in the acrylic-parted desks placed in a zigzag when eating lunch, too. They must not talk while eating, as they're not wearing masks."
		"Students are seated facing forward only. They don't have activities where they can share their names; it's meaningless to change seat formation."
		"There's room for complaints from parents if students come in contact with each other. We can't be free from blame. The parents will tell me things like my child had been in close contact with this kid, and now that it's the teacher's responsibility, we should be more attentive and make sure that this does not happen by keeping close watch of students and warning them in advance."
2. Online classes are consuming.	2.1. Physically consuming	"Online classes are the hardest···I have to check whether students watched it or not and then leave a record, but I cannot mark them as absent right away when they haven't watched the class···When we teach in the classroom, the students seated there are assumed to be present. All I did was teach. However, when it comes to an online class, we have to make them watch by calling or texting them until they finally do it. Besides, the Office of Education and the school policy instruct us to avoid absenteeism as much as possible. So, I have to push them three to four times a day, which is exhausting."
		"It takes a really long time to make online content, and if the class contents take more than five minutes, elementary students cannot concentrate. So, we make two to three class contents taking less than 10 minutes respectively and upload them; this means that one subject needs several clips of contents, and that takes a really long time. Editing also takes time, meaning that a lot of time is wasted, and it's not efficient; and when parents see the class contents, it doesn't look good enough. They have high standards."
		"Parents who both work feel a lot of pressure to take care of their children's homework···Some parents prefer to get detailed feedback, while others feel burdened, considering it as their homework. Such different thoughts are mixed together; thus, teachers of students from the same grade would rather unify everything by leveling down."
		"COVID-19 seems to provide a cause for downward leveling in education."
		"The gap between students with higher grades and lower grades continues to widen, and self-directed children keep getting good grades, but the children who are not keep falling, and the most important thing is that the children in the middle are falling. Before the pandemic, students used to ask the teachers what they didn't understand, but now they have to take notes and wait for an in-person school day to visit the teacher, which is very rare."
		"My friend, a teacher at an elementary school, told me that 100% of the students completed their homework under her supervision. In my case, it was less than 10%. I was frustrated and hurt, and decided not to assign homework at all. She was giving a quiz using Google form in addition to homework every day. Students in Gangnam go to private institutes, and public education is going well, too. The parents of my students don't even cooperate with self-diagnosis. That's why teachers at my school got rid of homework altogether. In Gangnam, teachers get more encouragement to teach."
		"There are students from North Korea in my class. Even if they went to school there, they need more practice and care. If they are slow in learning, they need supplementary classes and care, but this cannot be easily supplemented online. The learning gap is clearly widening."
		"It's fine for students whose mothers can take care of them while they take online classes, but students with working mothers who are busy all day, they are left alone at home. The emergent care system receives applications, but there are cases where children are abandoned, and there should be support for them, although there are limitations."
		"Students from multicultural families and North Korean defectors seem to be more neglected online."

	2.2. Psychologically consuming	"The gap between teachers on digital ability is wide. In elementary school, the prevailing idea is to unify all the class contents. It's not about the age difference but about whether to accept the new methods. For example, some want to simply use class contents made by the public education broadcasting station. Such conflicts are the most psychologically exhausting for me."
		"At the elementary school level, lecture-style contents don't fit the educational goal, anyhow. Although we try our best to make them, they don't seem to get as much effect as it takes to prepare them… Why am I facing such difficulties in making this?'…But people say, 'Isn't the online class convenient?' They see us working less and more easily, which puts us down."
		"During this pandemic, I thought a lot about what education is. What am I teaching?… How can the learning deficit be overcome? My mind is full of these thoughts and they overwhelm me psychologically. Also, I'm having a hard time getting along well with my peer teachers. The gap between teachers on digital capacity is wide. In elementary school, a prevailing opinion is to unify all the class contents. It's not about the mere difference in age but about whether to accept the new methods, like some want to simply use class contents made by a public education broadcasting station. Such conflicts make me psychologically exhausted the most."
		"What teachers are most afraid of is that a student could screenshot selectively what they want without the teachers knowing it. They think that might harm them."
	2.3. Different thoughts on real-time classes	"I tried Zoom class, but it was not easy. When all the students came into the meeting room, everybody except me was appearing on the screen. It takes time for Zoom to transmit the video contents, and we have a lot to deliver in an hour at the high school level. I've reached my limit in delivering all that and getting feedback on everything."
		"People think that you just need a smartphone, but taking a class via cellphone does not seem to be effective when children have to concentrate on it through that small screen…So it's more about the purpose of seating the children down at 9 am. Some teachers use Zoom for an hour for that purpose, but it is time-consuming. Is everybody here? Did everybody turn on the camera? It's real-time, but it can't be effectively interactive."
		"From the parents' perspective, they say it's better to see their children communicating with the teacher instead of seeing them passively watch the screen. I heard that parents in the private school showed a high satisfaction level. They prefer Zoom class, as they can literally see the teacher leading a class via Zoom."
		"There is a limit to Zoom classes in high school. There are a lot of difficult concepts. Self-directed students go back to watch the class again and again… Some students repeat what they didn't understand… There are benefits and drawbacks. So, some disagreed when the Ministry of Education was pushing to expand real-time classes."
		"(In elementary school) there is a benefit of closer interaction between teacher and students—they see each other's faces. But it doesn't seem to increase the learning effect. Parents get an impression that the teacher is taking care of the students, or that the teacher is working hard…So parents' satisfaction is high for Zoom classes, but it doesn't necessarily help students learn better or improve their learning."
3. Teachers are vulnerable middle-men.	3.1. A guide who lacks resources	"A student with diarrhea in my class was absent from school since the manual says that a student with diarrhea or fever is suspended from going to school. Then the mother complained to me with anger, 'My kid's diarrhea is due to a stomachache and not the coronavirus.' I had a hard time explaining that I was just doing what my superiors told me to do. Such a situation creates conflict between people."
		"The communication among the Ministry of Education, parents, and teachers doesn't seem to be going well."
		"The information spreads fastest within the mothers' internet community. Teachers are the last people to receive them, but they are the ones who really need such information to apply it in practice. From the Ministry of Education to the Office of Education and then to the school principals, the homeroom teachers are the last to get informed."
		"When the coronavirus began spreading, the Ministry of Education announced that

	schools would begin online classes, although we haven't decided on how to conduct them. Parents then asked, 'How are you going to conduct online classes?' and we replied, 'It is not decided yet.' The parent then said, 'Teachers don't know either' *and are no different from us.'* We were embarrassed."
3.2. The easiest target	"Parents send messages about their stress: 'I fight with my kid every day about homework', which is ok, but there are texts like 'Why is this content so long? It's demanding to follow.' We usually edit it to take less than 20 minutes. Parents pour their complaints to teachers as we are in the front line and it's easy for them…I feel like seeing a psychiatrist. I get stressed more than I realize." "It is pure luck that there has not been a confirmed case in my class. Nevertheless, if there were a confirmed case, I would first of all recall if there were some rules I missed as a teacher. I feel like not being protected as I check these things."
3.3. The Gap between policy and practice	"The Ministry of Education announced that they are going to unify all the platforms, which is the so-called K-education platform. What is that all of a sudden? I'm stressed that the policy is not keeping pace with the school scene…As a teacher, I think there's a growing distrust of the Office of Education…They are creating a lot of policies that do not match what is really happening in schools." "I think the psychological burden felt by teachers in the field is not considered to be serious. If my student became a confirmed case or I had close contact with the confirmed student, I would be worried about my safety. But in fact, if only we had clear guidelines for administrative matters, it would not be that stressful, as there are good things and bad things even during the pandemic." "The students' biggest complaint is that they are tested on in-person school days. The Ministry of Education determined that homework outcome should not be evaluated, but only be tested in person at school. So, when they come to school, they are tested, no matter if it is written, performed, or whatever form it might take."
3.4. No support system for teachers	"Stress management for teachers is currently legally available only through the School Rights Protection Committee. If teachers were intimidated or beaten by students, then that kind of stress can be treated. But other than that, there's no ground to support any general exhaustion, and there's no department to take care of the issue." "Are corona blues real and powerful? Perhaps the media is encouraging it? In reality, don't students feel happy about not going to school? I have many doubts. It may be more important to look into the stress level of people such as medical staff and teachers who have to deal with a situation that keeps changing." "Speaking of portrait rights, counseling teachers have the same concern. … When one-on-one counseling takes place online, the student can record it and release it somewhere else… Suppose a less-experienced teacher said something inappropriate, and as a result, the student gets worse or even commits suicide. In this case, this could be used as evidence, and the teacher could [or have to] take all the responsibility. Many counseling teachers are concerned about this regarding online counseling." "We asked for advice and they said that basically, criminal punishment is not possible for portrait rights violations. The only [recourse] for the victim is to file a civil suit and get compensation for the violation of portrait rights. If there is criminal punishment, we can tell the student that he/she could be punished, but in reality, his/her attorney can just pay a fine and that's it." "Teachers are having a hard time now, but they're not sure if it's because of workload or because of the coronavirus. There is a Wee center (counseling service center) for students but not for teachers…Teachers are afraid of standing out, so they might not want to apply for the service. If others do something and I'm the only one not doing it that is also a problem. It's psychological." "People tend to feel better when others listen to them. In fact, I don't feel like my voice is being heard and accepted at school…If they make us feel that our voices are heard, it would help."

for medical treatment and examination. If the test results were negative or if the examination was not conducted based on the clinician's judgment [A1], they were allowed to attend school the next day, depending on their health condition.

Teachers, students, and parents were required to complete this morning routine promptly on a daily basis. Increased communication with parents was a burden to teachers, as they needed to remind the parents multiple times to complete the self-diagnosis process every morning. Moreover, teachers felt guilty about continually pushing the parents, especially in the case where both parents work and therefore, have busy mornings. Despite their guilt, teachers needed to be strict because their responsibility was linked to that of the school nurse, who was supposed to submit the reports collated from the homeroom teachers to the Office of Education within the same business day.

"Although many parents don't do it even after checking my message, I feel safe from being blamed otherwise. I feel like I just did my own homework." (E2)

"If the information is not collated from the homeroom teachers, the school nurse must take responsibility. If the report was not made at the school level, the Office of Education reproaches those schools with incomplete reporting." (H2)

During in-person schooldays, students often came to class without self-diagnosing. While some teachers monitored the thermal imaging camera outside the school building, others checked the students' temperatures individually. A single teacher alone could not complete the duty to take students' temperature, which required the cooperation of others and thus increased the burden for individual teachers.

"When they have just arrived in the classroom, it's hard to send them back downstairs for them to check their temperature. When that happens, I should take the student down to do it myself without anyone knowing it or communicating with teachers working downstairs. But that kind of manual [procedure] was not organized systematically." (E5)

Sub-theme 1.2: School without friendship

The COVID pandemic made it difficult for students to form social relationships and friendships, which used to be a significant part of school life. Classes were divided into two groups that attended school on different days, and students were guided along different routes to access their classrooms; as such, they were unable to contact each other freely. Only two students could go to the restroom at a time, and during lunchtime, students ate in silence at desks separated by acrylic panels. As they removed masks to eat, they were not allowed to talk. Moreover, because all student activities were banned to minimize social contact, lecture-style online classes became prevalent. The students were evaluated only by individual tests instead of group activities.

"Theories are dealt with in online class content, while students are evaluated based on their performance during in-person schooldays." (H2)

That students were subjected to performance evaluation every time they came to school was

their biggest complaint. As the number of in-person school days had been reduced due to the COVID-19 pandemic, the teachers had no choice but to evaluate students every time they came to school. In addition, the highest level of social distancing was needed not only to prevent the virus from spreading among students, but also to protect the teachers themselves. Teachers were feeling sorry for the students despite being conscious of controlling their students' behavioral boundaries.

"There's room for complaints from parents if students come in contact with each other. We can't be free from blame. The parents will tell me, for example, that their child had been in close contact with this kid. Now, to avoid being responsible, teachers like us need to be more attentive and scold students in advance." (E5)

Each class is instructed to use different routes to the restrooms, and only two students are allowed to go to the restroom at a time, so that they cannot meet up with other students there⋯It seems that friendship cannot be formed well. First of all, they all wear masks and are not allowed to talk to each other. There's no group activity in class, either⋯ Students are seated in the acrylic-parted desks placed in a zigzag when eating lunch, too. They must nottalk while eating, as they're not wearing masks."(E3)

"Students are seated facing forward only. They don't have activities where they can share their names; it's meaningless to change seat formation." (E1)

Theme 2: Online classes are energy-consuming

This theme emerged from two sub-themes: "physically consuming" and "psychologically consuming." "Physically consuming" emerged from two categories: "online classes are less effective despite increased teachers' efforts" and "remote learning widens the gap in public education." The sub-theme "psychologically consuming" was elicited from the categories labeled "conflicts between peers on teaching methods" and "teachers' concern about being screenshot/watched."

In traditional face-to-face classes, teachers and students interact simultaneously and in the same place, but online classes are relatively free from such constraints. Students can access online educational contents, usually a one-way lecture class, whenever they want. However, for classes conducted on Zoom or other real-time online classes, teachers and students are able to interact within the same time frame.

Sub-theme 2.1: Physically consuming

Online classes were the greatest change and challenge to the teachers, who had to prepare both online and in-person lessons. Most FGI participants pointed out that preparing online class content was time consuming, which was incommensurate with its learning effect, and this was generally not rewarding. Ironically, the public mistakenly assumed that online classes were more convenient for teachers because they did not have to give the same lesson repeatedly. Another disadvantage was that parents and students compared teachers' online contents with those of

private education companies that had invested more money and time in creating them. Moreover, except for self-directed students, most students had difficulty concentrating in online classes, were easily distracted and did irrelevant things, while still considered "present" for the class.

> "Also, editing takes time; a lot of time is spent on it. But it's not efficient and when parents see the class contents, they don't look as good as the ones made by a private education company. Parents have high standards." (E5)

Many participants expressed concern about the students' academic achievement during the pandemic. The learning gap between children from high- and low-income families has become even more significant in this remote learning era. The participants considered having someone available to supervise the children as an important factor that might determine how well they could learn from online classes. Further, working parents expressed feeling pressured by the increased homework when teachers assign homework to help students learn better remotely, thereby exacerbating the issue.

> "Some parents prefer to get detailed feedback, while others feel burdened, considering it as their own homework. Such different thoughts are mixed together; thus, teachers of students from the same grade would rather unify everything by downward leveling." (E2)

> "COVID-19 seems to provide a cause for downward leveling in education." (H3)

> "The gap between students with higher grades and lower grades continues to widen. Self-directed children keep getting good grades, but the children who are not keep getting lower grades, and the most important thing is that the children in the middle are falling." (H2)

Sub-theme 2.2: Psychologically consuming

This sub-theme was generated from the categories labeled "conflicts between peers on teaching methods" and "teachers' concern about being screenshot/watched." Not only were teachers physically exhausted from preparing online classes, they were also psychologically fatigued by their colleagues' differing opinions about the teaching methods. Some teachers expressed passion about adopting new digital techniques, but some older teachers lacked confidence, and others preferred a safer path such as unifying teaching and making evaluations by leveling down to reduce the disparity.

> "The gap between teachers on digital ability is wide. In elementary school, the prevailing idea is to unify all the class contents. It's not about the age difference but about whether to accept the new methods. For example, some want to simply use class contents made by the public education broadcasting station. Such conflicts are the most psychologically exhausting for me." (E2)

Certainly, differences in teachers' opinions on the methods existed before the pandemic, but at that time, teachers' discretion was guaranteed. Sharing online content created difficulties in reaching an agreement because of the teachers' differences in digital capacities and varied

thoughts about the direction of public education. Indeed, disagreements among teachers have increased during the online instruction era.

Meanwhile, teachers' concerns about being screenshot or watched were also considered psychologically taxing. In Korea, people usually understand that portrait rights are legal guarantees that one's photograph is not commercially used without one's permission, consistent with the right for human dignity. (Spielman, Saskin, & Thorpy, 1987) (10) The teachers feared out-of-context screenshots of themselves, perhaps taken to be used maliciously by immature students. Moreover, elementary school teachers, in particular, said that they felt uncomfortable being watched by their students' parents during Zoom classes.

"What teachers are most afraid of is that a student could screenshot selectively what they want without the teachers knowing it. They think that might harm them." (W1)

Sub-theme 2.3: Different thoughts on real-time online classes

The Ministry of Education announced that schools will move to 100% real-time (Zoom) classes while the pandemic persists. However, our participants opposed using Zoom all day. They emphasized that Zoom classes (real-time online classes) should be used for specific purposes, such as homeroom management during the school's opening and closing, and online classes should be designed to deliver knowledge on the theory level so that students can easily access content on areas where they need more practice.

Elementary school teachers also opined that it is

difficult for their students to concentrate on Zoom for hours. Interestingly, parents expressed preference for real-time Zoom classes because they feel relieved watching the teacher live and their children interacting with the teacher, regardless of the effectiveness of the class. Meanwhile, high school teachers asserted that online classes are more efficient for their students because they prefer classes from which the students can obtain more knowledge in a relatively shorter time. In summary, teachers, students, parents, and bureaucrats all expressed different thoughts about Zoom and online lecture classes.

"I tried the Zoom class, but it was not easy. When all the students came into the meeting room, I was the only one speaking on-screen, while the others turned off their screens. Also, it takes time for Zoom to transmit the video contents, and we have a lot to deliver in an hour at the high school level. I feel there is a limit for me in delivering all that and then getting feedback on everything within the given time." (H2)

"From the parents' perspective, they say it's better to see their children communicating with the teacher instead of seeing them looking at the screen without focusing. I heard that parents in private schools show a high level of satisfaction. They prefer Zoom classes, as they can literally see the teacher leading a class via Zoom." (H2)

"People [assume] that you just need a smartphone, but taking a class via cellphone does not seem to be effective when children have to concentrate on it through such a small screen···so it's more about the purpose of making the children sit down in front of the screen at 9 am." (E5)

Theme 3: Teachers are vulnerable middlemen

During the FGIs, teachers comprehensively discussed their various roles. The theme that "teachers are vulnerable middlemen" emerged from four sub-themes: "a guide who lacks resources," "lack of protection for teachers," "the gap between policy and practice," and "no psychological support for teachers." Teachers perceived themselves as powerless in various relationships. They did not believe they were protected by law or policy, even though they were at the forefront of dealing with parents and students. Concurrently, they felt that they were the last to receive relevant information and yet had to quickly follow orders from the head office at the national level, although these orders seemed arbitrary.

Sub-theme 3.1: A guide who lacks resources

Teachers had been getting instructions via regular school-level meetings, in which they simply received information about the government's official educational decisions or policies. However, there had been instances when the office released rushed decisions, through public media to soothe the people's anxiety, and even a mother's internet community was faster than the teachers in receiving the information. Despite being unprepared because of the lack of timely information, teachers still had to directly deal with such policies and guide students and parents accordingly.

"A student in my class who had diarrhea was absent from school [because] the manual says that a student with diarrhea or fever is suspended from going to school. Then, the mother complained to me with anger, 'My kid's diarrhea is due to a stomachache and not the coronavirus.' I had a hard time explaining that I was just doing what my superiors told me to do. Such a situation creates conflict between people." (E5)

"The information spreads fastest within the mothers' internet community. Teachers are the last to receive them, but they are the ones who really need such information to apply it in practice. Starting from the Ministry of Education to the Office of Education, then to the school principals, the homeroom teachers are the last to get informed." (H2)

"When the coronavirus began spreading, the Ministry of Education announced that schools would begin online classes, although we haven't decided on how to conduct them. Parents then asked, 'How are you going to conduct online classes?' and we replied, 'It is not decided yet.' The parents then said, 'Teachers don't know either and are no different from us.' We were embarrassed." (E5)

Sub-theme 3.2: The easiest target

The teachers said they were tired of receiving COVID-19-related complaints from students and parents while trying their best to accommodate hardships and sudden changes. Although they felt helpless as educators, they were being conscientious about the possible damages—academic or social—that student might face. Their responsibilities greatly increased, but the only way to protect themselves was to supervise students according to prescribed routines despite such routines being meaningless.

"Parents send messages about their stress. 'I fight with my kid every day about homework'… Parents pour their complaints to teachers as we are in the front line and it's easy for them to do that…I feel like going to a psychiatrist. I get more stressed than I realized." (E2)

"It is pure luck that there has not been a confirmed case in my class. Nevertheless, if there were a confirmed case, I would first of all recall if there were some rules I missed as a teacher. I feel like [I am] not being protected as I check those things." (E2)

Sub-theme 3.3: The gap between policy and practice

The news media report the Ministry of Education's decisions and policies on COVID-19 on a daily basis, but in reality, schools have great difficulty in keeping up. As a large community, schools find it challenging to satisfy a variety of needs from students, teachers, and parents. When a teacher needs to educate students, it becomes a different matter [A2]. Bureaucrats need to demonstrate effective action, but uninformed of the latest policy and trying to teach online, teachers occupy a vulnerable position between their superiors and those that they directly serve —the students and their parents.

"The Ministry of Education announced that they are going to unify all the platforms, the so-called K-education platform. What is that all of a sudden? I'm stressed that the policy is not keeping pace with the school situation. …As a teacher, I think there's a growing distrust of the Office of Education. …They are creating a lot of policies that do not match with what is really happening in schools." (E2)

Sub-theme 3.4: No Support system for teachers

Surprisingly, not only has there been no psychological support before or during the pandemic to help teachers manage their mental health, but also no legal support was offered to help protect themselves from being photographed inappropriately. For the last decade, attention to students' rights has risen rather rapidly, leading to the government-led counseling network WEE, ("WEE center. https://www.wee.go.kr/home/main.php") (11) an integrated support system for students' healthy and enjoyable school lives—connecting schools, education offices, and local communities. By contrast, teachers' rights have been mostly ignored, as if enforcing their rights would violate the students' rights. In fact, teachers receive no psychological help until they are victims of student violence. Also, as the teacher participants expressed their stress about being photographed inappropriately (theme 2.2), their concerns about students' violation of the portrait rights were noteworthy. In Korea, people usually understand that portrait rights are legal guarantees that one's photograph is not commercially used without one's permission, consistent with the right for human dignity. In this regard, the WEE center instructor who participated in our FGI described the situation very well:

"Stress management for teachers is currently legally available only through the School Rights Protection Committee. If teachers were intimidated or beaten by students, then such kind of stress can be treated, but other than that, there's no ground to support any general exhaustion, and there's no department to take care of [teachers]." (W1)

"In reality, don't students feel happy about not going to school? I have many doubts. It might be more important to look into the stress level of people such as medical staff and teachers who have to deal with a situation that keeps changing." (W1)

"Speaking of portrait rights, counseling teachers have the same concern. … When one-on-one counseling takes place online, the student can record it and release it somewhere else… Suppose a less-experienced teacher said something inappropriate, and as a result, the student gets worse or even commits suicide. In this case, this could be used as evidence, and the teacher could [or have to] take all the responsibility. Many counseling teachers are concerned about this regarding online counseling." (W1)

"We asked for advice and they said that basically, criminal punishment is not possible for portrait rights violations. The only [recourse] for the victim is to file a civil suit and get compensation for the violation of portrait rights. If there is criminal punishment, we can tell the student that he/she could be punished, but in reality, his/her attorney can just pay a fine and that's it." (W1)

Discussion

Through the FGIs with public school teachers, this study illustrated that the COVID-19 pandemic has changed public school education in three main ways, expressed here as three themes that have affected students, teachers, and parents in Seoul: "schools have no vitality," "online classes are energy-consuming," and "teachers are vulnerable middlemen." In fact, several participants mentioned that the pandemic caused them to revisit their thoughts about the school and public education in general.

Based on the FGIs, the interactions between teachers, students, and parents in the public schools of Seoul, South Korea under COVID-19 conditions are illustrated in a concept map (Figure 1). Their relationships revolved around self-diagnosis and remote learning, which were the two main obstacles that made the relationships between teachers, students, and parents uneasy in different ways. At the center of such uncomfortable interactions were the vulnerable teachers who were loaded with responsibilities. To everyone, the school environment seemed lifeless (Figure 1.)

As previously explained, the new self-diagnosis application took advantage of the convenience of smartphones to promote efficiency in the student management system. This system served mostly bureaucratic purposes and required considerable time and energy from teachers and parents while causing friction their relationship. Several participants demanded that the application be improved so that the collated information could be delivered immediately to the highest level without repetitive upward reporting. The participants also opined that the "no school" warning should be determined based on a more detailed guide in the application.

The participants' thoughts about what a school is supposed to be led us to think about the functions of a school. The students felt that their schools had no vitality because all social interactions and relationships were essentially

prohibited. During the pandemic, social distancing is considered the most effective strategy for preventing infection (Bavel et al., 2020), and it is strictly enforced in places where people gather, such as schools. The participants agreed that controlling students' behavioral and disciplinary boundaries had become easier than in the past when students were lively and excited. Social distancing caused students to become quiet and static, while teachers felt helpless about the situation and even a bit guilty. It was suggested that offering students Zoom social meetings outside classes could be beneficial: Students would be able to see their friends' unmasked faces and share the difficulties they currently face.

This study found that the current form of online classes exhausted teachers and students physically and psychologically. The participants agreed that a hybrid of online and real-time online classes is the best way to conduct schooling until South Korea could resume pre-COVID-19 education. The Ministry of Education has insisted on moving toward 100% real-time online classes, but teachers contended that students' age and the class subject (Jongnam, 2020) should have been considered before making such a decision. Most importantly for successful real-time classes, teachers claim that devices for economically lower class students and technological support for teachers are necessary. The unequal opportunities of distance learning and the struggles of teachers have been revealed (Kaden, 2020) in a case study that included an interview with a K-12 teacher in the United States. It found that not only did students learn

less in online classes than in face-to-face classes but they also lost social interaction, peers, and their lively school.

In the FGIs, public school teachers identified themselves as vulnerable middlemen. While being in the forefront, they were also trapped in the middle of the relationship between educational stakeholders. Despite being on the front line, they were acting as guides for students and parents without receiving the information they needed in a timely manner. They also lacked protective measures, such as specific legislation and psychological support. Overall, they were repeatedly attempting to adjust to a rapidly changing, arbitrary environment while protecting themselves from various risks related to COVID-19. After repeated disappointments, they gave up making productive suggestions. To empower teachers, it is necessary to respect their voices—starting with the Ministry of Education—which will then also be reflected in the way parents and students treat teachers.

The present study captured the voices of public-school teachers working under COVID-19 conditions. Although the opinions of nine teachers might not represent the entire community, reviewing the changes and challenges that schools are going through can help in preparing for the pandemic in the long term. Conducting qualitative research with parents and students will shed further light on the long and seemingly unending COVID-19 "tunnel" and unearth hidden narratives behind the statistics at the government level. The integration of education and technology is no longer a choice to promote flexibility and

creativity in teaching (Onyema, 2019). Moreover, because events such as school shutdowns due to the pandemic are unprecedented, unpredictable challenges can arise and counter scenarios will be needed to cope with them (Akour et al., 2020).

This study has several limitations. First, since qualitative research was not conducted based on quantitative research, the opinions of a small number of participants cannot be generalized to the opinions of all public-school teachers. Second, it was attempted to recruit subjects from elementary school to high school, but it was not possible to include all school levels because middle school teachers did not actually participate. Lastly, the policies responding to COVID-19 are different for each region and school, so it is not possible to cover all the difficulties of teachers according to various teaching methods and environment. Despite these limitations, this study is expected to help schools to perform their original functions by identifying the actual and psychological distress of school teachers in a pandemic situation.

In conclusion, through the voices of public-school teachers, this study revealed what changes and challenges public schools in Seoul, South Korea have experienced. FGIs with the nine teachers enabled us to consider various scenarios in the public education system from an insider's perspective during the COVID-19 pandemic. When the bureaucracy initiates policies and directives without heeding students and teachers' voices, schools become dull and static for all educational stakeholders, a situation that government statistics are not likely to reveal. Furthermore, this study's qualitative approach contributes by disclosing how teachers are perceived and treated and how they identify themselves in the COVID-19 pandemic. Adding students' and parents' perspectives to the literature will help us better understand the educational dynamics during this difficult time, to energize and enliven schools once more.

Reference

Akour, A., Al-Tammemi, A. B., Barakat, M., Kanj, R., Fakhouri, H. N., Malkawi, A., & Musleh, G. (2020). The Impact of the COVID-19 Pandemic and Emergency Distance Teaching on the Psychological Status of University Teachers: A Cross-Sectional Study in Jordan. *Am J Trop Med Hyg, 103*(6), 2391-2399.

Bahn, G. H. (2020). Coronavirus Disease 2019, School Closures, and Children's Mental Health. *Journal of the Korean Academy of Child and Adolescent Psychiatry, 31*(2), 74-79.

Bavel, J. J. V., Baicker, K., Boggio, P. S., Capraro, V., Cichocka, A., Cikara, M., . . . Willer, R. (2020). Using social and behavioural science to support COVID-19 pandemic response. *Nature Human Behaviour, 4*(5), 460-471.

Braun, V., & Clarke, V. (2013). *Successful Qualitative Research: A Practical Guide for Beginners*: SAGE Publications.

Creswell, J. W. (2009). Editorial: Mapping the Field of Mixed Methods Research. *Journal of Mixed Methods Research, 3*(2), 95-108.

Education week. (2020). The Coronavirus Spring: The Historic Closing of U.S. Schools (A Timeline). Retrieved from https://www.edweek.org/leadership/ the-coronavirus-spring-the-historic-closing-of-u-s -schools-a-timeline/2020/07

Glesne, C. (2016). *Becoming qualitative researchers : An introduction, 4ᵗʰ Edition,* Pearson.

Jongnam, B. (2020). University students' efficacy in real-time online class as alternative methodology due to Corona virus(COVID-19) events. *Journal of Digital Convergence, 18*(11), 539-545.

Kaden, U. (2020). COVID-19 School Closure-Related Changes to the Professional Life of a K‑12 Teacher. *Education Sciences, 10*(6), 165.

Kim, H. H., & Jung, J. H. (2021). Social Isolation and Psychological Distress During the COVID-19 Pandemic: A Cross-National Analysis. *The Gerontologist, 61*(1), 103‑113.

Onyema, E. (2019). Integration of Emerging Technologies in Teaching and Learning Process in Nigeria: the challenges. *Central Asian Studies,* 1(1), 35-39.

Spielman, A. J., Saskin, P., & Thorpy, M. J. (1987). Treatment of chronic insomnia by restriction of time in bed. *Sleep, 10*(1), 45-56.

Unicef. (2020). COVID-19: Are children able to continue learning during school closures? Retrieved from https://data.unicef.org/resources/remote-learning-reachability-factsheet/

WEE center. https://www.wee.go.kr/home/main.php Retrieved from https://www.wee.go.kr/home/ main.php

World Health Organization. (2020). Coronavirus disease (COVID-19) pandemic. Retrieved from https://www.who.int/emergencies/diseases/novel-coronavirus-2019

Yoon, Y., Kim, K. R., Park, H., Kim, S., & Kim, Y. J. (2020). Stepwise School Opening and an Impact on the Epidemiology of COVID-19 in the Children. *Journal of Korean medical science, 35*(46), e414.

공립학교 교사들의 관점에서 본 COVID-19 팬데믹의 학교 현장: 한국에서의 질적 연구

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COVID-19 팬데믹(pandemic)은 등교 중지 및 원격수업 등의 형태로 학교 교육에 큰 영향을 주었고 교사들의 부담을 가중시켰다. 본 연구는 COVID-19로 인해 변화된 학교 현장에서 공립 교사들이 경험하는 심리적 고통과 소진 요인을 탐색하는 것을 목적으로 하였다. 이를 위해 현재 서울 소재 학교에서 근무하고 있는 9명의 교사를 대상으로 표적집단면접(Focus Group Interview, FGI)을 진행하였다. FGI에서 수집된 질적 정보들을 주제별로 나누어 분석하였고, 개방코딩을 통해 중복되는 개념을 제거한 후 초점코딩으로 하위 주제와 최종 주제를 개념화하였다. 그 결과, 국내 공립 학교에서 직면한 COVID-19의 문제는 '활력이 없는 학교', '소모적인 온라인 수업', '[힘 없는] 중간자인 교사'의 세 가지로 분류되었다. 본 연구는 COVID-19 기간 동안 학교 현장에서 교사, 학생, 학부모 간의 역학관계와 더불어 교사의 위치와 책임에 관한 인식을 파악했다는 것에 의의가 있다. 연구결과를 바탕으로 추후 교사들을 위한 심리적 지원에 대한 제언과 더불어 연구의 한계점을 논하였다.

주요어 : COVID-19, 공립학교, 교육, 온라인 교육, 자가진단, 학습격차