

Means to Cope with Difficulties Related to Online Learning Experience during the Pandemic: A Focus Group Interview Study with College Students

Pyong H. Kim^{1,*}

¹School Department of Educational Psychology, Seoul Women's University, Seoul, South Korea

*Correspondence: School Department of Educational Psychology, Seoul Women's University, Seoul, South Korea. Tel: 82-2-970-5565. E-mail: phkim@swu.ac.kr

This research was supported by the Academic Research Funding (Grant Number 2021-0470) of Seoul Women's University, Seoul, South Korea. I also thank my colleagues of Educational Psychology Department for their continuous support.

Received: April 1, 2022

Accepted: April 28, 2022

Online Published: May 18, 2022

doi:10.5430/jct.v11n4p235

URL: <https://doi.org/10.5430/jct.v11n4p235>

Abstract

Higher education organizations worldwide, including those in South Korea, are currently facing a major global health crisis caused by coronavirus disease-19 (COVID-19) since the spring 2020 semester. This study aimed at determining the difficulties that college students perceive in online courses, what strategies they use to cope with the problems they encounter, and what policies they demand the university to implement to enhance the situations. Six students (both undergraduate and graduate) from a university in a metropolitan area in South Korea participated in a series of focus group interview (FGI) sessions. The study conducted its sessions on October 11, 14, 21, and 22, 2021 in the university. Due to the distinct features of the online learning environment, students reported that they have major difficulties in staying academically motivated, suffer from fatigue and boredom, and have a hard time utilizing studying strategies. To cope with the current situation, the results revealed that students voluntarily form study group sessions with peers, and demand the university to provide them with a series of psychological therapy sessions as well as group study sessions. Educators and university leaders may apply the study results in order to better support their college students, so that they would be able to cope with these unprecedented pandemic-related problems, particularly regarding the online learning experience. Adequate supports provided to both instructors and students by reorganizing IT equipments and operating systems would result in better facilitation of online learning.

Keywords: online learning experience, college students, higher education, learners' perspectives

1. Introduction

1.1 Background of the Study

The widespread coronavirus disease-19 (COVID-19) has been causing a health crisis worldwide since December 2019 (Spinelli & Pellino, 2020). The pandemic has impacted the global community, and legal enforcement of physical isolation required by the Korean government presented a great impact on the most, if not all, groups of the nation. This resulted in many schemes of distractions, inconvenience, and agony in almost all areas of society, and many fatal effects on human daily life arose. The most widely applied means to cope with these circumstances has been to shift from face-to-face to intact workplaces or working at home, using various forms of technology. Such adaptation was evident from a wide range of industries.

One of the most addressed issues even by non-educators is online learning environments and how students and instructors manage difficulties they perceive. In the spring semester of 2020, nearly every university started implementing online learning methods. As a result, lecture halls, libraries, auditoriums, and other facilities that were crowded with students and other university members were closed. The major means of communication turned to

online, using videoconferencing platforms, emails, and learning management systems (LMS), and these phenomena are expected to continue in 2022. It is noticeable that this sudden and unanticipated shift occurred involuntarily, meaning that no staff was prepared for it, and every member of organizations was forced to adapt to the new environments.

Not surprisingly, higher education institutions underwent trials and errors. The Korean government struggled to suggest educational countermeasures to prevent the spread of the COVID-19 crisis, and the Ministry of Education announced the postponement of school opening and changes in academic management (Lee, 2020). Accordingly, most universities in South Korea postponed the opening of classes. However, in the end, offline classes were conducted only in those that desperately needed practice, experiment, and practical skills. Most of the universities ended up providing an online learning environment (Zaho, Kong, Aung, Yuasa, & Nam, 2020)). It is understandable that the leadership of the universities would have expected the pandemic to be altogether overcome shortly (e.g., by the end of the summer of 2020), which explains why most of the institutions were not prepared to provide adequate training and devices for instructors to successfully deliver online courses to students.

This unprecedented online learning continued for more than four consecutive semesters. Though many universities, students, and instructors became familiar with the online learning elements as time passed by, relevant problems and difficulties are evident in terms of class preparation, technical issues, and most of all, the learning quality that students receive. Both instructors and learners who were only familiar with offline classes experience confusion and conflicts. A few of main problems related to this issue appeared to include poor quality of lectures (Qamar, Kiran, Khan, Raza, Iram, & Rauf, 2021), poor systems for more of successful online learning environment (Murphy, Eduljee, & Croteau, 2020), lack of effective teaching-learning tools (Tsitsia, Kabbah, Doyi, Kabe, & Safo, 2020), and lack of student-student as well as student-instructor communications (Shim & Lee, 2020)). The method of online proctored examinations is another phenomenon resulting from the online learning environment. Lee (2020) reported that the exam proctoring environment (i.e., whether online or offline) is unlikely related to students' academic achievement and assessments regardless of the testing method.

The continuous spread of the virus, delaying in starting each semester on time, strict isolation policies, and social distancing measures across South Korea appeared to result in students' dissatisfaction regarding their college life. Studies showed that most college students are not satisfied with their online learning experience compared to their previous offline courses (Sansom, 2020; Sadiq, 2020). Its reasons include lack of face-to-face communication and social interaction, low quality of the online lectures, feeling of social isolation among their peers, and feeling of fatigue and boredom (Vargas, Howie, Muench, & Perlis, 2021). In line with this, this study aims to determine the difficulties perceived by college students in one of the universities.

In an unprepared situation, due to the COVID-19 outbreak in the spring semester of 2020, instructors, learners, university staff members, and even parents were confused as to the policies of online learning that were implemented (Pyryani, Pyryani, & Deo, 2020). In order to cope with the complexity and resolve the problems, the present study pursues to examine the difficulties that college students are experiencing regarding their online learning environments. Both instructors and students would be able to find the results of this study useful in a sense that accurately and subjectively understanding current circumstances and suggesting means to improve them.

2. Literature Review

The following paragraphs describe what online learning experience college students undergo, the SWOT analysis of online learning, and a few strategies for improved online learning from students' perspectives.

2.1 Online Learning Experience among College Students

Choi (2021) investigated college students' experience regarding their online learning environment. The author used the following questions for his study based on the four categories.

Table 1. Questions Regarding College Students' Online Learning Experience

Category	Question
Online classes	Can you tell us about your online learning experience?
	Can you explain how effective online class components are? It can include both synchronous and asynchronous classes.
	Can you tell us about your impression of the online learning system? It can include accessibility, speed, and content quality.
College life	What was your anticipation for college life prior to being admitted to the college?
	How do you handle problems occurring regarding the online learning experience and/or system?
	How do you manage your social relationships with your colleagues?
Self-recognition	Is there any activity in which you participate to foster your learning strategies?
	What was your feeling as you heard the news that the semester will take its place online?
	How do you feel about the remote learning you are having as of now?
	If you experienced any form of depression in learning due to COVID-19, what was your strategy to overcome it?
Others	What would you expect the instructors to do differently next semester?
	Is there anything else you would like to talk about?

The student participants reported that the remote learning experience offers a few advantages (e.g., easy access to online classes, convenience in reviewing the lecture contents, communication convenience through online media). However, the author concluded that the limitations and disadvantages of online learning outweigh the benefits. The student participants - particularly freshmen - appeared to feel that they repeated high school years, their rights as college students were deprived, and their social interactions with colleagues were limited. Also, student participants had only limited and ineffective access to information necessary for their online classes. Since their time spent at home largely increased due to the social restrictions, many of those who failed to productively manage their time felt depression, powerlessness, and a lower level of self-esteem.

Based on the findings, Choi (2021) suggested that instructors who conduct and manage synchronous online courses need to develop course contents that are suitable for online components to enhance students' understanding during each lecture. In the meantime, it is necessary to establish a stable infrastructure for online content at higher education institutions and provide administrative support for content utilization (Dhawan, 2020).

2.2 Strengths, Weaknesses, Threats, and Opportunities (SWOT) of Online Learning

Novikov (2020) proposed a SWOT analysis of the transition to online learning. The study was conducted to investigate various socio-cultural, technical, and personal challenges that students encountered during the COVID-19 era.

The strengths included improved flexibility for learning, the ability to use a wider range of multimedia resources, reduced rate of distractions caused by peers in classrooms, and a better environment in which students can focus on individual assignments leading to increased self-reliance. The weaknesses included technical difficulties involving hardware and software, a decline in retention rate, increased delays in teacher-student communication, fatigue in online learning leading to demotivation, and initial absence of fully adapted remote teaching methods. The opportunities included teacher training leading to the creation of high-quality online learning content, students' improved computer literacy and technological adaptability, and more opportunities to provide education to students regardless of their ability to travel. The threats included increased teacher attrition rate, devaluation of traditional offline learning, increased reliance on technology rather than personal skills, avoidance of face-to-face communication leading to lowered cultural and social adaptability, and increased opportunities for cheating and other forms of malpractices.

2.3 Strategies for Improved Online Learning

Davis, Chen, Hauff, and Houben (2018) conducted a review of the literature in learning strategies aiming to create a more active learning experience. The authors' have identified metacognitive strategies, questioning, feedback, and cooperative learning as the four most promising factors that would improve the online learning experience among college students.

2.3.1 Metacognitive Strategies

Hattie (2008) defined metacognitive behavior as “higher-order thinking involving active control over the cognitive processes engaged in learning”. It is a skill necessary for online learners because they need to be self-directed and coordinate their learning strategies as well as time management, rather than heavily depending on instructors (Kauffman, 2018). Literature in the field of educational psychology suggests that fostering metacognitive strategies of learners is likely to result in their improved academic performance [18]. Those who indicate the importance of supporting learners’ metacognitive awareness demonstrate the difficulty of implementing this complex cognitive process (see Kauffman, 2018 for review). It clearly shows that interventions designed to support learners’ metacognitive strategies have much potential to improve the overall quality of online learning.

2.3.2 Questioning

Hattie (2008) indicated questioning as a highly effective teaching strategy by having learners pose thoughtful questions that elicit critical thinking, introspection, and new ways of thinking. The author highlighted that the questioning methods can prompt learners to retrieve and activate prior knowledge in formative assessment contexts. Also, this technique appears to be highly effective in the sense that learners can understand their own positions in comparison to their goals, particularly in an online setting (Guasch, Espasa, & Martinez-Melo, 2019). Though it requires much training and practice, questioning is also known to stimulate learners’ critical thoughts beyond the superficial levels of factual knowledge.

2.3.3 Feedback

Guasch et al., (2019) defines feedback as “information provided by an agent about aspects of one’s performance or understanding”, in which the agent could be teacher, peer, book, parent, or even one’s own experience and perspective. When teachers strategically provide students with feedback, it can have the learners reflect on their approach to a given situation. Specifically, learners are highly likely to feel isolated and detached from the instructors, other peers, and even the course itself when feedback provision is limited (Colombino, Dall’Anese, & Bernstein, 2019). Hence, it is instructors’ critical responsibility to provide ample, timely appropriate, and accurate feedback to students to improve their overall performance as well as satisfaction levels.

2.4 Effects of Pandemic in Education

Wang, Degde, Son, Keller, Smith, and Sasangohar (2020) conducted an online survey in which 2031 college students participated. Their results showed that 960 participants were experiencing moderate-to-severe level of depression, 775 were undergoing moderate-to-severe level of anxiety, and 366 had suicidal thoughts. Only 43.25% of the participants indicated that they were adequately able to cope with the stress related to the pandemic. In terms of coping mechanisms, more than half of the participants addressed support from family and friends as key factors, and others mentioned the use of technology, counseling services, and meditation as forms of support.

Akat and Karatas (2020) stressed that COVID-19 resulted in psychological effects mainly because it continuously spreaded out globally, death rates increased, and restrictions applied against people’s willingness. They estimated that impacts caused by the pandemic are likely to induce many short-term and long-term problems in education fields. The authors offered a few recommendations for young people to cope with the ongoing crisis, including maintaining social relationships with others even online, participating in relaxing exercises and sports activities, counseling experts to ease stress and fear, and ensuring personal development such as reading and playing musical instruments. The authors also suggested education stakeholders to strengthen the infrastructure of the online learning system, making sure that no student is deprived of education, and to participate in in-service training to improve their online teaching competencies.

2.5 Research Questions

This study aimed to determine the difficulties perceived by college students in the online learning environment. Specifically, it sought answers to the following questions.

Research Question 1. What difficulties do college students perceive regarding the online learning environment, and what mechanisms do they prefer to use to overcome the challenge?

Research Question 2. Which method of examination do students prefer: online, offline, or combination of both?

3. Methods

3.1 Select of Participations

The study adopted an approach named ‘focus group interview’ that involves a small number of samples that has similar demographics with common traits (i.e., same university, pursuing to become a teacher in the future career, and woman) (Cheng, 2007). The purpose of this method was to gather crucial data regarding a certain topic (i.e., college students’ experience as online learners) for further analysis. The researcher attempted to congregate ideas and opinions from the participants’ interactions during the course. A more detailed description of guideline and questionnaire is attached in the Appendix A. The researcher chose a total of six student participants via a ‘purpose sampling’ method in order to form a sense of bonded relationships among them. A more detailed description of the participants is shown in Table 2.

Table 2. Background of the Student Participants

Group Number	Participant Number	Age	Gender	Sessions Conducted	Pursuing Degree	Major
1	Student 1	22	Female	October 11 and October 14, 2021	Bachelor’s	Educational Psychology
	Student 2	22			Bachelor’s	
	Student 3	24			Doctoral	
	Student 4	20			Bachelor’s	
2	Student 5	26	Female	October 21 and October 22, 2021	Doctoral	Childhood
	Student 6	21			Bachelor’s	Education

3.2 Data Collection and Analysis

The study took a qualitative research approach. The researcher conducted two interview sessions with each group (a total of four sessions), using an online videoconferencing software, Zoom. It took less than 50 minutes per session in October, 2021. When participants were not able to join, they instead filled out questionnaire that researcher had sent in advance. An open questionnaire was used that Kruger & Casey (2000) suggested as an interview tool that included 1) imposing questions, 2) preliminary questions, 3) main questions, and 4) concluding questions. After conducting a preliminary interview, orders and contents of the questions were revised prior to focus group interview sessions. To heighten reliability and validity of the qualitative data analysis, a participant with a doctoral degree in educational psychology major and a participant with a doctoral degree volunteered as research assistants to confirm the accuracy of the interviewed contents.

4. Results and Analysis

4.1 Difficulties Students Perceive

The student participants’ difficulties they appeared to perceive were classified as five distinct categories: difficulty in concentrating, difficulty in staying motivated, fatigue and boredom, difficulty in (effectively) communicating with instructors, and financial difficulty.

Table 3. Difficulties Students Perceive

Category	Statement	Date	Participant
Difficulty in concentrating	“Concentrating is the biggest issue because it’s the goal very hard to achieve, and even if I start concentrating, maintaining the feeling of concentrating is another issue.”	October 14, 2021	Student 3
	“I don’t even remember the last time I spent my time wholly on the class. I mean, it’s really easy to get lost and distracted with all the smartphones and other digital devices around the laptop. No one even tells me what to do; it gives more distractions and temptation do things other than paying enough attention to the classes.”	October 22, 2021	Student 5
	“Starting to study in class is okay, but staying focused is another	October 14,	Student 2

	problem. I get to lose my sense of focusing for most of the time.”	2021	
	“I really have no idea how my friends keep focusing on during classes. It’s really hard for me to do so.”	October 11, 2021	Student 2
	“I mostly feel as if I’m studying alone with no one else around. This loneliness does not help at all. It actually worsens my need to study.”	October 14, 2021	Student 3
Difficulty in staying motivated	“It’s not like the offline courses I used to have in high schools or before COVID-19 situations. I keep falling apart from the idea that I have to work on the assignments and get ready for midterms and finals. It’s almost like, ‘why should I bother if no one else is studying?’”	October 21, 2021	Student 5
	“Both recorded and synchronous classes are hard to stay focused. I think synchronous classes are even harder.”	October 11, 2021	Student 2
	“Others seem to study hard and for long time. For me, it’s not the case for most of the time.”	October 21, 2021	Student 4
Fatigue and boredom	“During most of the online classes, I open up other windows because it’s so boring.”	October 11, 2021	Student 1
	“I keep watching the clock, asking myself ‘when is this going to over?’”	October 22, 2021	Student 6
	“Feeling sleepy is the usual feeling I get for every class I attend.”	October 14, 2021	Student 1
	“Not every professor, but some professors respond to my emails in a very tardy fashion. Do they not check their emails everyday? It’s one of their responsibilities.”	October 22, 2021	Student 5
Difficulty in communicating with instructors	“I felt isolated and disconnected everytime I found that the professor didn’t even read my email. Isn’t it their job to respond to my questions? I’m not sure if they are doing their jobs right.”	October 14, 2021	Student 3
	“My friends shared these tips with me about how to get the professor read my message [on the LMS (learning management system)]. Unless I apply these, you wouldn’t get the answers you wanted from them [the instructors]”.	October 14, 2021	Student 2
	“Getting the professors’ response in time is not happening everyday. It’s frustrating because you don’t know what to do next if you don’t get a reply from them [professors].”	October 21, 2021	Student 4
	“I didn’t have a laptop before. For the online [courses], I had to get one and other necessary equipments.”	October 22, 2021	Student 6
Financial difficulty	“You might think you’d save money because there is no commuting to schools, but it’s not the case. The used laptop I bought was much more expensive than I thought it would be. Because I used to use the [cheap] school restaurants before, the money for food costs a lot these days because now I order deliveries for my meals almost everyday.”	October 21, 2021	Student 4
	“Thankfully, at least the university gave me this free Zoom account for classes, but they are not paying me for the laptop, keyboard, and monitor that I needed the most.”	October 21, 2021	Student 5

4.2 How Students Cope with the Perceived Difficulties

The student participants’ strategies to cope with the difficulties they perceived were classified as three categories: forming a series of study group sessions, consulting in-school counselors, and studying alone.

Table 4. How Students cope with the Perceived Difficulties

Category	Statement	Date	Participant
Forming a series of study group sessions	“My high school friends and I meet online, and show how we study to each other. It’s kind of helping me to realize that I have to study, and I’m not the only one who needs to study.”	October 14, 2021	Student 2
	“This [pandemic] brought me a chance to focus on myself more than before. I could deeply reflect on what I should do in the near and far future, and realized that I am the one who makes important decisions, not the others. It somewhat helped me overcome [the difficulties I perceive].	October 22, 2021	Student 6
Focusing on oneself instead of others	“I used to spend unnecessarily much time on finding out what other people are doing using SNS (social network services). But it’s got changed. Now finding out what I like to do is getting easier and easier for me because that’s what I do almost every day.”	October 22, 2021	Student 5
	“It sounds bizarre, but my social relationships are <i>on a diet</i> . It means that I communicate with only a few people I like the most. For the rest of the time, I do what I like to do, instead of spending my energy to please other people.”	October 21, 2021	Student 4
	“The school has some online and offline counseling sessions for free. I find the offline counseling very helpful because she [the counselor] seems to understand my problems from every perspective.”	October 14, 2021	Student 1
Consulting in-school counselors	“Last semester, I attended this seminar, and they let me know that the university has counselors. I visited because it was free. The counselor I met there somewhat eased my mind for a while. It helped, but not much.”	October 11, 2021	Student 2
	“My friend from another major recommended me a therapy session. I found that I’m not the only one struggling with studying. It gave me a sense of relief.”	October 22, 2021	Student 4
Studying alone	“I used to study alone before COVID-19, and I still study alone. It’s my style, and I’m sticking to it because it saves much time and money.”	October 11, 2021	Student 1

4.3 Policies Students Expect the University to Implement

The policies that the student participants expect the university to implement were classified as three categories: group study session, psychological therapy session, and professional development sessions for instructors.

Table 5. Policies Students Expect the University to Implement

Category	Statement	Date	Participant
Group study session	“Studying together might be helpful, though I’ve never tried it before. Since students do not volunteer to do so, the school can help us with that.”	October 14, 2021	Student 3
	“As I said earlier, I like to study with my friends online. What if the school gives us the same kind of chance? I’m sure many others will benefit from that.”	October 14, 2021	Student 2
Psychological therapy session	“The counselors are helpful, but [I] need more sessions like them. It’s great to have someone who understands your situations when no one else does.”	October 14, 2021	Student 1
	“During the pandemic, it’s the psychological status that is more at stake than other criteria. So the school should provide us with some forms of therapy with experts.”	October 21, 2021	Student 6
Professional development sessions for instructors	“You won’t believe how many professors are still not used to using Zoom and other online applications. I seriously think they need some forms of instruction in that category. I mean, didn’t they learn how to use the [online] tools last year already? Sometime I feel like I can handle Zoom better than they can.”	October 22, 2021	Student 6

4.4 Students' Preference on Examination Methods

The student participants were asked to elaborate which method of examination they prefer and why (i.e., online, offline, or combination).

Table 6. Students' Preference on Examination Methods

Category	Statement	Date	Participant
Preferring an Online Form of Examination	"My professor last semester gave us online exams for both [midterm and final]. It was great because I could easily find out what I got wrong and right."	October 11, 2021	Student 2
	"The biggest advantage [of online examination] is that you don't have to hand-write everything. It [writing by hand] is so much tiring mostly because you don't get to write by hand often because we're used to using smartphones and computers"	October 11, 2021	Student 1
	"Though some [of my classmates] like traditional tests because of cheating issues. But I think the benefits of online tests far exceed the traditional ones."	October 14, 2021	Student 3
Preferring an Offline Form of Examination	"When I type my answers, I can think much faster [than writing by hand], which helps me do better on tests. Initially, I was against taking tests online, but now I like it so much better."	October 21, 2021	Student 6
	"I heard some people cheat during online tests because the professor cannot check everyone. Because almost every course does relative evaluation [in which only half of students receive A+ and A, whereas others receive B+ or lower level], you get to become very sensitive on that issue."	October 21, 2021	Student 4
Preferring a combination of both online and offline form of examination	"Technology is not a friendly terminology for me. I have been taking tests offline for the entire of my life. I don't think I'm ready for online tests yet."	October 21, 2021	Student 5
	"The pros and cons of both [online and offline] tests are obvious. So I even requested my professor to do both: one for the midterm, and one for the final exam, though she didn't follow it."	October 14, 2021	Student 1
	"If we combine the two, we can benefit from both of the test types."	October 11, 2021	Student 3

5. Discussion and Conclusion

5.1 Discussion

The study attempted to find out what difficulties college students currently experience, what means of resolutions they implement in to overcome the perceived difficulties, what policies they expect the university to implement, and which method of examinations they prefer to take: online, offline, or combination of both.

The findings showed that the student participants were generally struggling with difficulty in concentrating, difficulty in staying academically motivated, fatigue and boredom while preparing for examinations, difficulty in effectively communicating with instructors and peers, and financial difficulties regarding their online learning experience. The findings also showed that the student participants attempted to form group study sessions with peers, consult in-school counselors, and study alone as they cope with the difficulties they encounter. It appeared that the student participants wish their university to provide them with university-led group study conferences as well as psychological therapy sessions to better cope with the problems. Lastly, the student participants appeared to prefer the online examination method over offline and the combination of both mainly due to its convenience (e.g., typing keyboard over writing by hand) and access to the information regarding the examination results that the instructors give, using the provided learning management system. Such outcomes appeared to be similarly aligned with those of previous researches (Aguilera-Hermida, 2020; Nasri, Husnin, Mahmud, & Halim, 2020).

As for the limitations, since the data of the present study were collected and analyzed from six participants attending a

single university, the results are likely to be different from those of the overall population. There also exists a certain restraint to generalize its findings. Therefore, it is desirable that future studies are conducted not only with larger student bodies, but also with instructors in order to evaluate their viewpoints. More techniques including surveys, in-depth one-on-one interviews, class observations, self-reports of instructors and learners, and reflections may be applied. Another major limitation of the study is that the student participants' responses were evaluated qualitatively, but not quantitatively. Measuring the status of college students' feelings regarding their perspectives on online learning using Likert scales, for example, could lead to a more accurate analysis of their current learning experience, which would achieve relevant goals.

Even in difficult situations, continuous efforts and understanding need to be maintained steadily in the future online learning environments. As a few previous studies supports, the quality of online courses as well as student satisfactory levels can gradually improve through mutual understanding and joint efforts based on students' determination to stay academically motivated, instructors' efforts to resolve presented problems, and the organizations' supports (Viswanath, Lee, & Pinnamaneni, 2020). With higher than 75% of full vaccination rate in South Korea as of early November, 2021, the government and higher education in general expect offline courses to resume next semester. However, since many students still wish to pursue online learning environment in some forms (e.g., hybrid courses), the instructors need to implement its elements during the courses. Correctly and accurately analyzing students' difficulties and their needs would be the first stepping stone to result in a perfect balance between online and offline approaches.

5.2 Conclusion

In South Korea, COVID-19 began negatively affecting college students' academic performance and motivation, resulting in decreased class quality and satisfaction level for their university life in general. Features that led to worsening the situations include inadequate management of the unexpected phenomenon, insufficient preparation of the online class system, lack of proper interaction between instructors and students, university staff members' low familiarity with online learning devices, and lack of infrastructure for online learning system provided.

Those who were willingly admitted to online universities in which distance learning is the major form of learning undergo difficulties while taking courses; it is altogether reasonable to assume that non-online university students who were forced to take online courses against their will without preparation or warning are experiencing distress and confusion. College students' experience related to online learning appears to be generally negative, but intact courses, student counseling, and other online conferences using various forms of technology are likely to be demanded the post-COVID-19 era. This is mostly because the students have learned a few unexpected advantages that online courses could have offered (e.g., convenience of staying home, less physical commuting to the institution, less stress derived from social interactions, financial ease, etc.).

From such perspectives, one can find the results of the study meaningful in the sense that they contributed to understanding the psychological status of college students and what policies they expect the university to implement. Using the findings of the study, policymakers, as well as leadership of higher education institutions, may enforce strategies to reduce the students' distress and to foster instructors' skills necessary for managing online classes.

Analyzing the findings of the study, one can conclude that it would be necessary to assess the life patterns of college students and establish an appropriate learner-centered system, breaking away from the existing curriculum and instructor-centered approach support policy. Doing so would allow the students to better adapt to the framework of more effective academic management. This indicates that universities should create a student-friendly academic management system in line with the changing environment. It is also necessary to prepare a learning management system that considers the situations of college students' online learning experience due to COVID-19. There is a need to develop various forms of online learning approaches, because college students need to find a perfect balance between schoolwork and family life.

Additionally, to prevent dropout rates of college students - a major concern in higher education in South Korea - and to improve their academic performance in online learning environments, instructors need to emotionally support students by forming a sense of rapport or togetherness with them. It is also desirable to provide college students with practical learning strategies by introducing mentoring or tutor systems currently used in remote universities.

There are a few recommendations for more effective online learning courses conducted in college settings based on the findings. First, it appeared that the students were going through a wide range of difficulties regarding their online learning experience. This is rather an unexpected result especially because many of them were considered to become used to the new environment in which offline courses were almost completely removed. Prior to providing its

students with desired assistance, the university needs to be aware of the precise hardship that the pandemic had presented to the student body. These findings made meaningful contribution from this perspective. It would be necessary to develop various teaching and learning approaches (e.g., lecture and discussion, presentation, group activities, flipped learning method, team project activities, etc.) that can be achieved on online platforms (mostly Zoom) accordingly.

Second, the student participants appeared to cope with the problematic situations that they were encountering, even when supports from university were insufficiently provided. From the participants' responses, the researcher could learn that there is a strong need to promote interaction, and cooperative learning among students and instructors that can actively reflect students' opinions to develop and apply appropriate teaching methods. One disadvantage of online learning is that it can easily cause lack of instructor-student as well as student-student communications as there exists physical distance among them (Deming, Goldin, Katz, & Yuchtman, 2019). This problem was evident from the present study.

Third, it is necessary to provide adequate supports to both instructors and learners by re-organizing IT equipments, teaching and learning supports, and operating systems in order to better facilitate online learning. As many of the student participants appealed that a small body of the faculty needs to develop their IT-related skills, relevant training is likely to resolve the problems. Since the problems that the pandemic has been causing seem to distress students' psychological well-beings, many of students may find group therapy sessions helpful to ease their minds.

References

- Aghajani, M., & Adloo, M. (2018). The Effect of Online Cooperative Learning on Students' Writing Skills and Attitudes through Telegram Application. *International Journal of Instruction*, 11(3), 433-448. <https://doi.org/10.12973/iji.2018.11330a>
- Aguilera-Hermida, A. P. (2020). College students' use and acceptance of emergency online learning due to COVID-19. *International Journal of Educational Research Open*, 1, 100011. <https://doi.org/10.1016/j.ijedro.2020.100011>
- Akat, M., & Karataş, K. (2020). Psychological effects of COVID-19 pandemic on society and its reflections on education. *Electronic Turkish Studies*, 15(4), 1-13. <https://doi.org/10.7827/TurkishStudies.44336>
- Cheng, K. W. (2007). A study on applying focus group interview on education. *Reading Improvement*, 44(4), 194-199.
- Choi, H. S. (2021). A Study on the Non-face-to-face Teaching Experience of College Freshmen due to COVID-19. *Korean Journal of General Education*, 15(1), 273-286. <https://doi.org/10.46392/kjge.2021.15.1.273>
- Colombino, M., Dall'Anese, E., & Bernstein, A. (2019). Online optimization as a feedback controller: Stability and tracking. *IEEE Transactions on Control of Network Systems*, 7(1), 422-432. <https://doi.org/10.1109/TCNS.2019.2906916>
- Deming, D. J., Goldin, C., Katz, L. F., & Yuchtman, N. (2019). Can online learning bend the higher education cost curve? *American Economic Review*, 105(5), 496-501. <https://doi.org/10.1257/aer.p20151024>
- Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, 49(1), 5-22. <https://doi.org/10.1177/0047239520934018>
- Guasch, T., Espasa, A., & Martinez-Melo, M. (2019). The art of questioning in online learning environments: the potentialities of feedback in writing. *Assessment & Evaluation in Higher Education*, 44(1), 111-123. <https://doi.org/10.1080/02602938.2018.1479373>
- Hattie, J. (2008). *Visible Learning: A synthesis of over 800 meta-analyses relating to achievement*. New York, Routledge.
- Kauffman, H. (2018). A review of predictive factors of student success in and satisfaction with online learning. *Research in Learning Technology*, 125, 327-344.
- Kruger, R. A. & Casey, M. A. (2000). *Focus Groups: A Practical Guide for Applied Research*. Thousand Oaks, California, Sage Publications.
- Lee, J. W. (2020). Impact of proctoring environments on student performance: Online vs offline proctored exams. *The Journal of Asian Finance, Economics, and Business*, 7(8), 653-660.

<https://doi.org/10.13106/jafeb.2020.vol7.no8.653>

- Lee, M. W. (2020). Online Teaching of Chemistry during the Period of COVID-19: Experience at a National University in Korea. *Journal of Chemical Education*, 97(5), 2834-2838. <https://doi.org/10.1021/acs.jchemed.0c00881>
- Mohamad, N. N., Husnin, H., Mahmud, S. N. D., & Halim, L. (2020). Mitigating the COVID-19 pandemic: a snapshot from Malaysia into the coping strategies for pre-service teachers' education. *Journal of Education for Teaching*, 46(4), 546-553. <https://doi.org/10.1080/02607476.2020.1802582>
- Murphy, L., Eduljee, N. B., & Croteau, K. (2020). College Student Transition to Synchronous Virtual Classes during the COVID-19 Pandemic in Northeastern United States. *Pedagogical Research*, 5(4), 1-10. <https://doi.org/10.29333/pr/8485>
- Novikov, P. (2020). Impact of COVID-19 emergency transition to online learning onto the international students' perceptions of educational process at Russian university. *Journal of Social Studies Education Research*, 11(3), 270-302.
- Pyryani, R. M., Piryani, S., & Deo, G. (2020). COVID-19 transmission dynamics: A little bit of confusion. *KIST Medical College*, 2(2), 73-75. <https://doi.org/10.3126/jkistmc.v2i2.33776>
- Qamar, K., Kiran, F., Khan, M. A., Raza, S. N., Iram, M., & Rauf, A. (2021). Challenges of e-learning faced by medical teachers and students during Covid-19 Pandemic. *Pak Armed Forces Medical Journal*, 71(1), 3-9. <https://doi.org/10.51253/pafmj.v71iSuppl-1.6191>
- Sadiq, M. (2020). Policing in pandemic: Is perception of workload causing work-family conflict, job dissatisfaction and job stress? *Journal of Public Affairs*, e2486. <https://doi.org/10.1002/pa.2486>
- Sansom, R. L. (2020). Pressure from the pandemic: Pedagogical dissatisfaction reveals faculty beliefs. *Journal of Chemical Education*, 97(9), 2378-2382. <https://doi.org/10.1021/acs.jchemed.0c00657>
- Shim, T. E., & Lee, S. Y. (2020). College students' experience of emergency remote teaching due to COVID-19. *Children and Youth Services Review*, 119, 1-7. <https://doi.org/10.1016/j.childyouth.2020.105578>
- Spinelli, A., & Pellino, G. (2020). COVID-19 pandemic: perspectives on an unfolding crisis. *Journal of British Surgery*, 107(7), 785-787. <https://doi.org/10.1002/bjs.11627>
- Tsai, Y. H., Lin, C. H., Hong, J. C., & Tai, K. H. (2018). The effects of metacognition on online learning interest and continuance to learn with MOOCs. *Computers & Education*, 121, 18-29. <https://doi.org/10.1016/j.compedu.2018.02.011>
- Tsitsia, B. Y., Kabbah, S. K., Doyi, B., Kabe, S. K., & Safo, P. (2020). College of education student-teachers' perceptions on the e-learning in the era of COVID-19 pandemic. *European Journal of Education Studies*, 7(12), 561-571.
- Vargas, I., Howie, E. K., Muench, A., & Perlis, M. L. (2021). Measuring the effects of social isolation and dissatisfaction on depressive symptoms during the COVID-19 pandemic. *The Moderating Role of Sleep and Physical Activity*, 11(11), 1449-1462. <https://doi.org/10.3390/brainsci11111449>
- Viswanath, K., Lee, E. W., & Pinnamaneni, R. (2020). We need the lens of equity in COVID-19 communication. *Health Communication*, 35(14), 1743-1746. <https://doi.org/10.1080/10410236.2020.1837445>
- Wang, X., Hegde, S., Son, C., Keller, B., Smith, A., & Sasangohar, F. (2020). Investigating mental health of US college students during the COVID-19 pandemic: Cross-sectional survey study. *Journal of Medical Internet Research*, 22(9), e22817. <https://doi.org/10.2196/22817>
- Zhao, B., Kong, F., Aung, M. N., Yuasa, W., & Nam, E. W. (2020). Novel coronavirus (COVID-19) knowledge, precaution practice, and associated depression symptoms among university students in Korea, China, and Japan. *International Journal of Environmental Research and Public Health*, 17(18), 6671-6683. <https://doi.org/10.3390/ijerph17186671>

Appendix

The following contains interview guidelines and questions researchers used as a cue sheet during each session.

Round	Type of Question	Contents
Round 1	Opening Questions	Welcome to our session! First, we'd like to hear from you about your selves. Please introduce yourself to the others. Tell us your name, age, major, and a brief background.
	Introduction Questions	<ul style="list-style-type: none"> • How was your general experience in using Zoom and other online applications? • Can you tell if your online learning experience was successful? Why, or why not? • What Zoom experiences have you heard from the news and/or other colleagues? • Can you share some strategies that made your online learning experience successful? It doesn't have to be yours; it could be others' strategies that you might have observed previously.
	Transition Questions	<ul style="list-style-type: none"> • Have you been suggested about strategies for successful online learning experience? • What difficulties have you experienced during online learning?
	Core Questions	<ul style="list-style-type: none"> • How did you cope in order to overcome such difficulties? • We are going to summarize our opinions that were suggested from the session.
	Conclusion Questions	<ul style="list-style-type: none"> • (The researcher summarizes the opinions and shares them with the father participants.) • Do you find this summary well organized? If anything is missing that needs to be revised or added, please let us know at this point. • What kinds of supports do you suggest the University to provide to students for successful online learning experience? • What supports do you receive from the University from your perspective and experience?
Round 2	Core Questions	<ul style="list-style-type: none"> • How often do you receive supports from the University to make your online learning experience more successful? • How do you think your learning experience would change next semester as we are likely to go back to offline classes?

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).