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# Views of fashion design students on distance and hybrid education

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#### Abstract

As a result of the Coronavirus epidemic, which started to appear in the first months of 2020 and gradually affected the whole world, and the earthquake disaster that occurred in Turkiye on February 6, 2023, centered in Kahramanmaraş and affecting 10 provinces, the distance education process was started in education levels. It was decided that education in higher education institutions will be carried out by distance education method in the 2023 Academic Year Spring Term, and then, as of April 3, 2023, it will be processed as Hybrid, which is a mixed education model in which the traditional education method is enriched with online education materials. At this point, it is considered important to investigate how efficient the newly implemented distance and hybrid education method is for students. This study aims to reveal the opinions of students studying Fashion Design about the distance and hybrid education process at the level of knowledge and skills. The study group of the research consisted of students studying in the Fashion Design Program of Sakarya University of Applied Sciences Design Department in the spring semester of the 2022-2023 academic year. Research data was collected with a survey measurement tool created by the researcher. The content analysis method was used to analyze the research data. The research topic is important and will contribute to the field as it will bring suggestions to make the distance education process in Fashion Design education more effective.

*Keywords:* Distance education; fashion design; hybrid education.

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#### 1. Introduction

Educational paradigms are changing in light of developments in information and communication technologies in the 21st century and findings from today's research. As a result of these changes, some differences are observed in educational environments, teaching approaches, course materials, learning methods, and techniques. In addition to previous education concepts, concepts such as e-learning, web learning, web 2.0 tools, online education, distance education, and hybrid education are starting to be used and taking their place in the literature (Demir, 2014; Turan et al., 2022).

Distance education is the biggest change that today's information and internet technologies have brought to educational environments. Distance education is the carrying out of educational activities without physical interaction through devices such as television, computers, tablets, and mobile phones. Referring to the history of distance education, Clark (2020) states that this method has been used in letters, radio, books, newspapers, etc. since the past. It reminds us that it is carried out with tools. That's why distance education is not a concept that has emerged in recent years. The development of information systems and technology has diversified the environments in which distance education is offered (Karakuş et al., 2020; Demir, 2021; Delcker & Ifenthaler 2022).

When research on distance education is examined, it is evident that this method has advantages in terms of economy and accessibility. Khan and Williams (2007) state that distance learning platforms are a very effective tool in providing educational opportunities, especially to disadvantaged groups and thus reducing poverty. Arat and Bakan (2014) list features such as being able to appeal to a wider audience, having time and place flexibility, being shaped according to the individual's learning speed and method, and allowing the use of multimedia tools among the advantages of the distance education environment.

On the other hand, there are some problems with distance education, which has many benefits. Elcil and Şahiner (2014), in their study with students of Istanbul University Faculty of Communication, stated that student-teacher interaction in distance education was weak, problems such as distraction and lack of motivation were experienced, and thus, the effect of distance courses was low compared to traditional education. However, Camas Garrido et al., (2021) emphasized the necessity of improving educational strategies and upgrading digital platforms to enhance the relationship and high communication between teachers and students in a hybrid class as it improves their academic performances. According to Altiparmak et al., (2011), issues such as the necessity of a certain information technology infrastructure, the individuals who will use the system not being prepared for the programs, and financial inadequacies restricting some students' access to education are seen as problems of distance education.

Hybrid, which is used in the Latin sense of hybridity and has its origins in biology, has the same meaning as concepts such as blending and mixing in the literature and is generally defined as using two existing phenomena together to obtain a better product (Usta, 2007). In hybrid education, where web-based education and face-to-face education are used together, the course is given face-to-face and distance education at a determined rate.

Although hybrid and online distance education are seen as complementary education, there are distinctions between their purposes, the technological tools they use, methods, techniques, and learning processes. The emergence of hybrid education is due to the lack of communication that occurs in distance education, being flexible and accessible, increasing student success, and being economical in terms of time, information, and space. Hybrid education provides advantages in completing the shortcomings of distance education and supporting face-to-face education, thus strengthening the bond of communication and interaction between teachers and students. It helps the teacher coordinate in-class activities. It ensures the active participation of the student in individual and group studies.

In addition, there are many contributions of technology-supported hybrid learning in education, these are; These can be listed as ease of access to teaching materials for teachers and students, flexibility of learning environments, flexible interaction time and environment, and saving time and economy. Negative aspects of hybrid education; It can be expressed as the inadequacy of qualified teaching materials to be presented in the hybrid environment according to the readiness levels of the students and the design of the learning environment inside and outside the classroom (Kumaş, 2023). In cases of staying away from face-to-face education, which is the most ideal environment for learning, it becomes important to ensure that information communication technology is sufficient to meet the

new generation's needs within the scope of learning and teaching practices (Elisondo et al., 2023; Huan & Yang 2022).

With the COVID-19 epidemic deeply affecting education in Turkey, along with all countries in the world, and schools having to suspend face-to-face education, important steps have begun to be taken in distance education in Turkey. As a result of the COVID-19 pandemic, steps towards integrating technology into the classroom environment are being followed by online learning methods, instructors, staff, and students in higher education institutions around the world.

After the COVID-19 epidemic, normalization processes were gradually started and face-to-face education was started in the education processes. However, due to the earthquake disaster dated 09 February 2023, centered in Kahramanmaraş and affecting ten provinces, education in higher education institutions will be carried out by distance education method in the 2023 Academic Year Spring Semester; Then, as of April 3, 2023, it was decided to operate as Hybrid, which is a mixed education model in which the traditional education method is enriched with online education materials.

The hybrid education model, which was decided to be implemented in higher education institutions, has started to be implemented in the field of fashion design, which is an application-oriented program. A fashion designer, who is a practitioner of the discipline, is defined as a person who has high critical thinking and problem-solving competence, has a developed aesthetic perception, can carry out research processes, has the knowledge and skills required by the field, can make new, creative, original designs and turn these designs into products (Çınar, 2020). In the field of Fashion Design, who can analyze the target audience in line with the needs of the sector, produce original, new, creative, aesthetic clothing and accessory designs, have knowledge and skills in materials and production techniques, follow the latest information and innovations in art and design, is prone to teamwork? It is aimed at training fashion designers. Students who receive a Fashion Design associate degree education are trained to be able to transform the design process into production by assimilating it both in terms of application and creativity, with the education they receive on creativity, aesthetics, technology use, and functional production principles.

Students who can carry out research processes, prepare collection story and color panels, basic and model-applied pattern drawing, marker plan and cutting processes, prototype preparation, planning and organization, trend tracking and forecasting studies, and acquire theoretical and practical knowledge about the profession. In addition, in the Fashion Design Program of Sakarya University of Applied Sciences, students have the opportunity to gain work experience in the field by working full-time in businesses for some time with the +1 Education Model and preparing application activities and projects. By covering all stages of production in detail, students will be able to master fashion and apparel business structure, management, and workflow issues, have basic knowledge and skills, and gain expertise through studies carried out within the framework of university-industry cooperation. To train professional staff who have the necessary skills, who know pattern and sewing techniques, and who have design skills.

#### 1.1. Purpose of study

Individuals who will work in a practical field as a Fashion Designer are expected to have acquired the skills as well as the theory required by the profession. In this context, the study investigated the opinions of fashion design students regarding the efficiency of distance and hybrid education methods in acquiring basic knowledge and skills.

## 2. Method and materials

In this section, the research model, the study group of the research, data collection tools, data collection, and analysis are explained.

#### 2.1. Research Model

The research is a descriptive study using the content analysis method in the qualitative research model. In qualitative research, small samples are generally studied that are anchored in their context and analyzed in depth (Miles and Huberman, 2016).

## 2.2. Participants

Purposeful sampling method was used when creating the study group of the research. In purposeful sampling, researchers purposefully select individuals and research venues to obtain information about or understand the main phenomenon (Creswell, 2017).

The study group of research consists of thirty-seven first and second-year students studying at Sakarya Applied Sciences University Fashion Design Program in the spring semester of the 2022-2023 academic year. The demographic characteristics of the study group are given in Figures 1, 2, and 3.

Information on the ages of the participants is given in Figure 1.

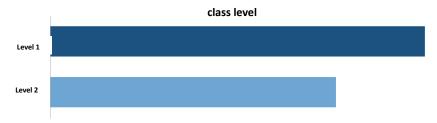
**Figure 1** *Age Distribution of Participants* 



Twenty-five of the participants are between the ages of 18-24. Four participants are between the ages of 35-39. The age range distribution of the remaining eight participants is shown in the table.

Grade-level information of the fashion design program students participating in the research is given in Figure 2 is given.

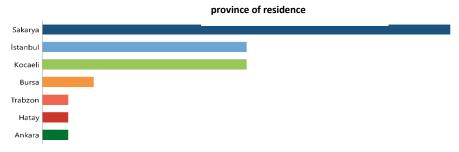
Figure 2
Class level distribution of participants



Twenty-one of the participants are first-year students, and sixteen people are sophomores.

Participants' province of residence information is given in Figure 3.

**Figure 3** *Participants' Province of Residence* 



It is seen that the participants mostly reside in Sakarya province. This is comprised of relatively fewer participants residing in Istanbul and Kocaeli provinces.

#### 2.3. Data Collection Tools

A 25-item survey form developed by the researcher and structured in line with the opinions of field experts was used as a data collection tool in the study. The first 4 items of the prepared survey include questions regarding the demographic information of fashion design associate degree students. The remaining 21 items are rating scales that question participants' views on distance and hybrid education and open-ended questions about their reasons. The prepared survey was presented to the opinion of two different field experts, corrections were made based on the feedback received, and the form was given its final form after the pilot application with three students. The 25-item survey prepared for the distance and hybrid education process of fashion design students was shared via e-mail and the opinions of the study group were collected.

#### 2.4. Ethics

Within the scope of the research, an application was made to the Sakarya University of Applied Sciences Ethics Committee Unit for data collection studies, and with the ethics committee permission obtained, the data collection tool was applied to students studying in the Fashion Design Program of Sakarya University of Applied Sciences in the spring semester of the 2022-2023 academic year.

#### 2.5. Data analysis

Content analysis was used during the data analysis process. In content analysis, the researcher first developed codes and categories related to the research topic. The data categorized by content analysis was interpreted by descriptive analysis. In descriptive analysis, data are summarized and interpreted according to predetermined themes (Özdemir, 2010). All qualitative research, whether content analysis, discourse analysis, thematic or descriptive analysis, is built on the following common processes; creating codes, creating categories, and turning categories/classes/themes into regular relationships (Yıldırım & Şimşek, 2008). The codes created as a result of the data obtained and the relationships of the categories were arranged and interpreted with the MAXQDA program. These regulations and comments are given in more detail in the findings section below.

#### 3. Results

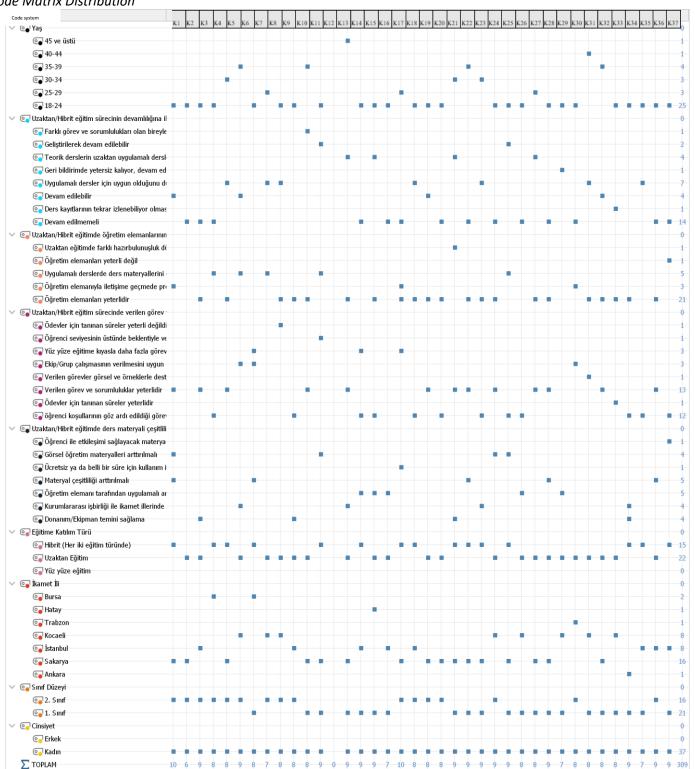
#### 3.1. Overview of Codes and Categories Used in Content Analysis

Below, the general views of the codes and categories obtained from the analysis carried out with the MaxQDA program are given in the matrix table. The rows in the table represent the codes of the study, and the columns represent the cases of the study. The density of the boxes varies depending on the expressions coded in the matrix table. The main purpose of presenting this table is to help the reader concretize the general view, codes, and pattern of categories formed in the analysis.

When Figure 4 is examined, apart from the demographic characteristics of the participants, namely age, gender, class level, and province of residence, the codes primarily note that the distance and hybrid education process should not be continued, instructors are competent and sufficient in distance and hybrid education. I do not think that the distance and hybrid education process is suitable for applied courses, the instructors are insufficient to use the course material effectively in applied courses, the duties and responsibilities given to the student are sufficient, and they constitute the relatively less processed codes of the category in the analysis pattern. Distance and Hybrid education are suitable for individuals with different duties and responsibilities, the student's different readiness levels are not taken into account by the instructor, the time given for assignments is not sufficient, and there is an expectation of tasks above the student's level, and they constitute the relatively least processed codes of the category in the analysis pattern.

Figure 4

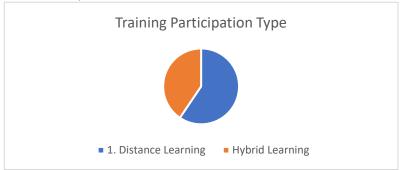
Code Matrix Distribution



## 3.2. Distribution of Codes at Category Level

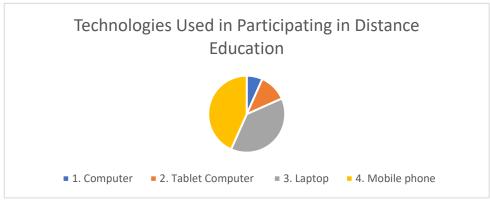
In the next part of the study, the patterns created by the basic categories and codes will be given in more detail through graphics, and the analysis will be deepened by supporting examples of verbatim quotes from the cases, and an attempt will be made to create a basic view in the reader's mind for the conclusion part.

Figure 5
Type of Education Participation



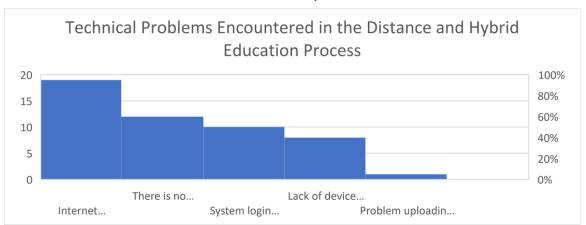
Participants' training participation type information was created with three subcodes. Figure 5 shows that they mostly participate in distance education. This is followed by the Hybrid training participation type. A code was created for the face-to-face education participation type, but it was observed that this participation type was not provided.

**Figure 6** *Technologies Used in Participating in Distance Education* 



The technologies preferred by the participants in participating in distance education are presented in a pie chart in Figure 6. It was learned that the participants mostly preferred the phone after the laptop when participating in distance and hybrid education. In order from most to least preferred, they are laptop, phone, tablet, and desktop computers.

**Figure 7** *Technical Problems Encountered in the Distance and Hybrid Education Process* 



The technical problems experienced by the participants during the distance education process were questioned and sub-codes were created as a result of their answers. It is stated that the most common technical problem in distance education is the internet connection problem. This is followed by the answer "I do not experience any problems at a relatively lesser intensity." Sakarya University of Applied Sciences Distance education process with live lessons, exams, etc. It carries out its applications with the LMS system. A significant portion of the participants states that they experience system login problems. Again, participants use cameras, speakers, microphones, etc. It is experiencing problems due to a lack of hardware. Although the density is low, it seems that there are problems in uploading assignments to the LMS system.

**Figure 8** *Knowledge Gain of the Courses Taken in the Distance and Hybrid Education Process* 

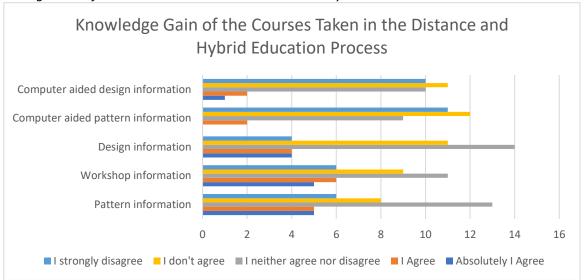


Figure 8 shows the participants' responses regarding their knowledge acquisition of the courses they took during the distance and hybrid education process. The most common response to the acquisition of knowledge-level gains for mold knowledge, workshop knowledge, and design knowledge courses was neither agree nor disagree. The other response that follows this at a high rate is seen as disagree. The highest response given to the knowledge level acquisition of computerized mold and computerized design courses was "I disagree". The answers given by the participants provide data that the courses taken through distance and hybrid education are insufficient to acquire knowledge-level gains.

**Figure 9**Skill Level Acquisition of Courses Taken During the Distance and Hybrid Education Process

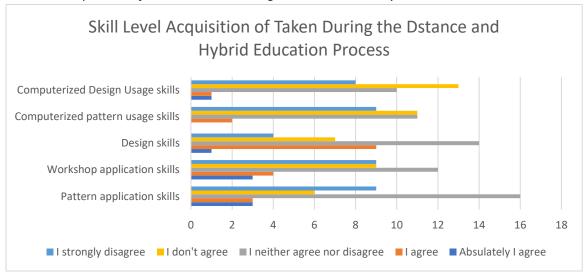
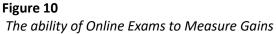


Figure 9 shows the participants' responses regarding their acquisition of skill-level gains in the courses they took during the distance and hybrid education process. The participants' frequent responses regarding the acquisition of pattern application, workshop, and design skills during the distance and hybrid education process were neither agree nor disagree. The answer given relatively less frequently regarding the acquisition of pattern application skills is "strongly disagree", while the answer given regarding the acquisition of workshop skills is "disagree". The second most common answer regarding the acquisition of design skills is "I agree". Regarding the acquisition of computerized pattern usage skills, the participants expressed their responses as neither agree nor disagree and disagree in equal proportions. The answer "I disagree" regarding the acquisition of computerized design usage skills in the distance and hybrid education process stands out. The answers given by the participants provide data that the courses taken through distance and hybrid education are insufficient to achieve skill level gains.



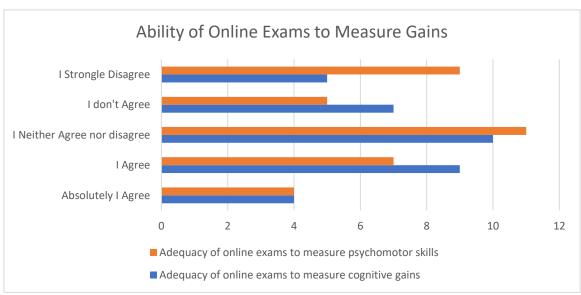
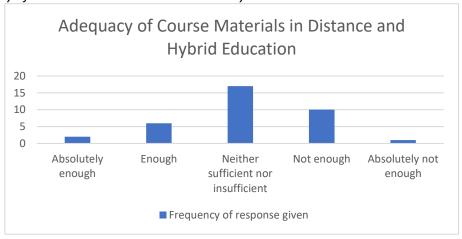


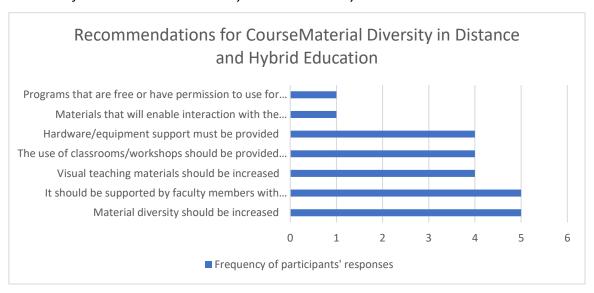
Figure 10 shows participants' responses regarding whether online exams are sufficient to measure cognitive and psychomotor skills. Participants often responded neither agree nor disagree when measuring cognitive gains. This response is followed by the relatively less frequent response "I agree". In measuring psychomotor skills, neither agree nor disagree regarding the adequacy of online exams comes to the fore. This response is followed relatively less frequently by strongly disagree.

**Figure 11**Adequacy of Course Materials in Distance and Hybrid Education



In Figure 11, participants frequently answered neither sufficient nor inadequate regarding the adequacy of course materials used in distance and hybrid education. This response is less frequently followed by an "inadequate" response. The relatively minimal response appears to be "absolutely inadequate".

**Figure 12** *Recommendations for Course Material Diversity in Distance and Hybrid Education* 



Participants were asked to make suggestions for course materials used in distance and hybrid education. The answers they gave frequently were that the variety of materials should be increased and supported by practical explanations by instructors. This response was relatively less frequent: visual teaching materials should be increased, classroom and workshop usage opportunities should be provided in the provinces of residence with interinstitutional cooperation, and hardware/equipment should be provided. The least frequent answer was that materials that will enable interaction with the student should be used and programs that are free or have permission to use for a certain period should be used. Examples of open-ended answers given by participants regarding the diversity of course materials in distance and hybrid education are given:

- K 1. "Students can be given machines for a temporary period or opportunities can be provided for them to work in public education courses."
- K 21. "The universities in the city I live in can provide supportive education."
- K 27. "Having more videos that we can watch in live lessons and providing us with more resources."

**Figure 13**Opinions on Duties and Responsibilities Given in the Distance and Hybrid Education Process

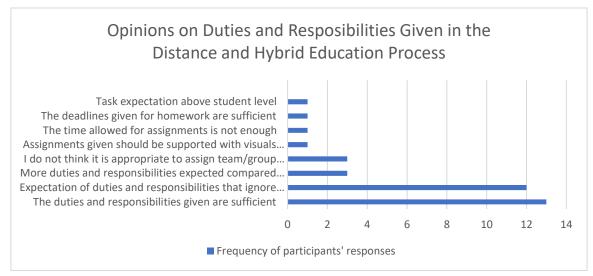
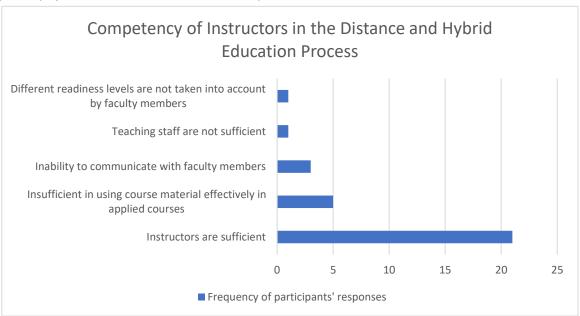


Figure 13 shows the answers given by the participants regarding the duties and responsibilities that faculty members expect from students during the distance and hybrid education process. Participants often state that they find the assigned duties and responsibilities sufficient. Relatively less frequently, the task expectation response, in which student conditions are ignored, comes to the fore. This is followed by the answers that more duties and responsibilities are given compared to face-to-face education and that team/group work is not considered appropriate. The answers given at a minimum rate were: the time given for homework is sufficient, the time given for homework is not enough, and the answers given are tasks given above the student's level. Examples of openended answers given by participants regarding the duties and responsibilities given during the distance and hybrid education process are given below:

K 20. "There are miscommunications in group work because it is remote, and students are asked to ship their homework without considering their financial costs. Compulsory seminar etc. Giving homework. Giving too much homework without considering that the student is receiving distance education."

K 32. "Everyone should be assigned duties and responsibilities, taking into account the possibilities at their disposal." K 34. "I fulfilled my responsibilities as a student as much as I could. But it was a difficult process because I did not know applications such as computers or programs."

**Figure 14**Competency of Instructors in the Distance and Hybrid Education Process



The highest percentage of participants state that they consider the instructors sufficient in the distance and hybrid education process. This answer is followed less frequently by the answer "I do not find it sufficient to use the course material in practical courses." Participants stated that they had problems communicating with faculty members. The answer "The teaching staff is not sufficient and different readiness levels are not taken into account by the teaching staff" was given relatively least frequently. Examples of open-ended answers given by participants regarding the competence of faculty members in the distance and hybrid education process are given below:

K 11. "I think the faculty members are doing their best."

K 12. "I think the faculty members are sufficient in this process. However, without making generalizations, I would like to state that in some courses, the homework, announcements, and information given to the students are not fully provided to the students within and outside the class hours and that I have problems contacting the responsible instructor about this issue.

K 24. "Our professors are really good, helping as much as they can. When I send a message, they respond immediately. When I don't understand and ask, I can ask again and again, and they never do things like not answering or not seeing."

**Figure 15** *Opinions on Continuing the Distance and Hybrid Education Process* 

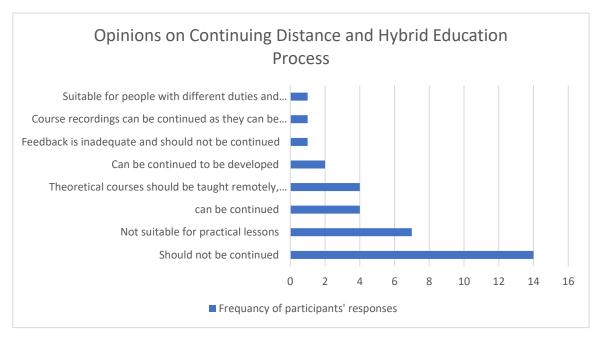


Figure 15 shows the responses of the participants regarding their opinions on continuing the distance and hybrid education process. It is seen that the participants responded at the highest level that it should not be continued. This answer is followed by the relatively less intense answer "I do not think it is suitable for applied courses." The answers "can be continued" and "theoretical courses should be taught remotely and practical courses should be taught face to face" were expressed equally. Other answers given were "it should not be continued because it is inadequate in providing feedback", "it should be continued because the course recordings can be watched again", and "it is suitable for individuals with different duties and responsibilities, it should be continued". Examples of participants' responses regarding continuing the distance and hybrid education process are shared below:

K 34. "I do not think that distance education has a full impact on the student and I think it should not continue. The opportunities provided to students for applied courses are very inadequate. We are missing a lot of information that we can benefit from face-to-face. "Social interaction between teachers and students cannot occur with distance education."

- K 23. "Distance education is very difficult for the fashion design department and should not be continued."
- K 18. "As a married mother of 3 children, I am very pleased with this situation. I have the opportunity to receive education while taking care of my children at home. I think that I benefit from all the more convenient and comfortable opportunities at home, and I wish it to continue."
- K 10. "Although distance education may sometimes be insufficient, it can be preferred for the convenience and practicality it provides."

#### 4. Discussion

With the COVID-19 epidemic deeply affecting education in Turkey, along with all countries in the world, and schools having to suspend face-to-face education, important steps have begun to be taken in distance education in Turkey. After the COVID-19 epidemic, normalization processes were gradually started and face-to-face education was started in the education processes. However, due to the earthquake disaster dated February 9, 2023, centered in Kahramanmaraş and affecting ten provinces, education in higher education institutions will be carried out by distance education method in the Spring Term of the 2023 Academic Year, and then, as of April 3, 2023, Hybrid

education model, which is a mixed education model in which the traditional education method is enriched with online education materials, will be implemented. It was decided to process it as.

The study, which determined and evaluated the opinions of fashion design associate degree students regarding the distance and hybrid education process in gaining basic knowledge and skills, was carried out with thirty-seven participants studying at the Fashion Design Program of Sakarya University of Applied Sciences. The following results were obtained from the findings obtained from the analysis of the participants' answers with the MaxQDA program:

- It seems that the problem frequently encountered in the distance education process is the internet connection problem. Lack of devices/hardware is also among the problems experienced.
- It is stated that distance and hybrid education processes are insufficient in the acquisition of knowledge at the knowledge level of pattern, workshop, design, computerized pattern, and computerized design courses in the field of fashion design.
- It is stated that distance and hybrid education processes are insufficient in the acquisition of skill level gains in pattern, workshop, design, computerized pattern, and computerized design courses in the field of fashion design.
- Exams conducted online during the distance and hybrid education process are seen as insufficient in measuring the acquisition of psychomotor skills.
- Exams conducted online during the distance and hybrid education process are seen as sufficient to measure cognitive gains.
- Participants state that they consider the course materials used in the distance and hybrid education process to be inadequate.
- The suggestions made by the participants for the variety of course materials were that the variety of materials should be increased, the teaching staff should support them with practical explanations, visual teaching materials should be increased, opportunities for using classrooms and workshops should be provided in the provinces of residence through collaborations, and equipment should be provided.
- Participants state that student conditions are ignored and assigned duties and responsibilities during the distance and hybrid education process.
- Participants consider the instructors sufficient in distance and hybrid education processes.
- Participants' opinions regarding the continuity of the distance and hybrid education process were that it should not be continued.

#### 5. Conclusion

Epidemic diseases and disasters are the problems of our age, and they present distance and hybrid education models as a solution to education processes. However, in applied disciplines such as fashion design, these training processes require serious infrastructure and material preparation. The findings obtained from the research also concretize this. Since transitions to distance and hybrid education processes are possible in the coming periods, researchers and field experts may be advised to focus on studies on the development of teaching materials that will provide knowledge and skills in the field of fashion design and appeal to different sensory organs (visual, auditory, tactile, etc.).

In addition, educational institutions' production of risk solutions to meet the physical infrastructure, device, and hardware deficiencies that students may encounter during distance and hybrid education processes will reduce the problems that may be experienced in the future. Internet connection problem is also an important finding in distance education processes. Policies should be produced to eliminate this problem and provide free and easy access.

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