

## The Role of Online Teaching Tools on the Perception of the Students during the Lockdown of Covid-19

Kurdistan Salih Mohammed<sup>1</sup> & Chnar Abdullah Rashid<sup>2</sup> & Hajar Abdulqadir Salih<sup>3</sup> & Taylan Budur<sup>4</sup>

<sup>1</sup>College of Basic Education, Sulaimani University, Sulaymaniyah, Iraq

<sup>2</sup>Department of Accounting, Sulaimani Polytechnic University, Sulaymaniyah, Iraq

<sup>3</sup>College of Public Administration and Natural Resources Management, University of Charmo, Sulaymaniyah, Iraq

<sup>4</sup>Business and Management Department, Tishk International University, Sulaymaniyah, Iraq

Correspondence: Taylan Budur, Tishk International University, Sulaymaniyah, Iraq.

Email: taylan.budur@tiu.edu.iq

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**Abstract:** Due to COVID-19 pandemic majority of public and private institutions around the world went to lockdown for an unknown end. One of the most important sectors, which faced trouble was education, hence many universities and academic institutions have shifted to online learning via various platforms to make their academic year going. Tishk International University as one of the private universities in Sulaymaniyah has conducted different online platforms to survive academic year. Students' perception toward online education became a great question to be answered during the coronavirus period. Secondary data were collected via questionnaire based on Likert Style, and the results showed that, minor majority of the answers were satisfied in term of experiencing online education, which is considered as accepted because it was first experience. Moreover, even though 40% of them were happy about online education more than half of the respondents received lower than what they have expected.

**Keywords:** Covid-19, Online Education, Lockdown, Students Satisfaction, Zoom, Online Education Tools, Kurdistan, Iraq

### 1. Introduction

Education is considered as a process of knowledge acquisition and learning (Serin, 2018; Mart, 2017). Implemented methods of education such as discussion, training, storytelling, teaching, video, assignment, and research played a great role in educating people for decades (Altun, 2017). To become an educated person, people may try to attend in a class, or they might depend on themselves as it called "self-study" (Mart, 2013a; Mart, 2013b). Generally, it is noticed that education has been classified into several sections, starting from nursery, kindergarten, primary school, high school until it reaches destination, which is known as university. In these academic environments, various learning methods are implemented based on the level of students and their capacity of learning (Pasha & Gorya, 2019).

Parallel to the fast development in the internet as a result of globalization, many academic organizations such as universities and colleges have focused on distance learning and made investment in order to spread out knowledge all around the world as a proper alternative to traditional methods of teaching (Birch et al., 2019; Öztas, Özdemir, & Mart, 2017). In this respect, Pallot and Pratt (2003) examined students' vision and perception on the online education. So far, they noted that students' uncountable perspectives must be well understood in online education to increase their satisfaction. Moreover, Isman et al. (2010) explored that not only student cultural background is a matter in online education but also their personal qualities are significant.

Recently, COVID-19 has changed many things in human being's life from the basic to the most vital one (Celik et al., 2020). Education, which is considered as a key process in creating smart and knowledgeable person has been severely affected by this pandemic in a negative way as it forced the academic organizations to lock up their gates starting from China in the early of February 2020 and then other affected countries (Celik et al., 2020; Muthuprasad et al., 2020). Likewise, UNESCO at the end of April 2020 mentioned that more than a hundred countries around the world have closed their academic organizations due to corona virus (Unesco, 2020).

Iraq, which is surrounded by Turkey in Europe, Iran in Asia and Arab countries in Gulf has been affected by this pandemic. Furthermore, the strategic location that it has for trade among many countries also was a cause of spreading this disease inside (Budur & Poturak, 2020, 2021). In general, education in Iraq as in the rest of the world was in trouble and several public and private schools and universities have implemented online education to survive the academic year.

In Northern Iraq many private universities applied online education, especially those universities that have Bologna process. At the beginning of the period students agreed locking down universities and attended online education because their perceptions toward online classes were like everyone could pass and would be able to achieve. Following these, Tishk International University known as (TIU), was one of the universities that started with online education earlier in both Sulaimani and Erbil. It has opened a program called "Mercury" to upload recorded classes for students, also regularly students were attending the ZOOM meeting with their lecturers for extra discussions about the subjects. After experiencing several months with online education, students' perceptions to online education have sharply changed, as they have realised that traditional face to face meeting with lecturer in class has more advantages than online in terms of gaining knowledge. However, part of them were confused between traditional classes and online education because they thought assessment in latter looks easier.

In addition, the hard-economic condition due to COVID-19 made students live harder as it required to be online on the right time, attend live sessions via ZOOM based on the weekly schedule and buy advanced devices to watch and review academic materials such as; laptop and cell phone. On the other side, implementing e-learning required a suitable facility like smart devices for lecturer especially for mathematic modules and good internet line just not to be interrupted during classes.

Accordingly, current paper is organized to investigate student's perception and satisfaction with the online education during the lock down process between March and June 2020. More specifically, it aimed to measure the experience of the students from Business and Management Department in Sulaymaniyah in Zoom meeting room, Mercury education platform, and online assessment systems that lecturers have used.

## **2. Literature Review**

### **2.1 Online Education**

Many researches have conducted online education from various countries by using a novel technique linking internet- and cloud-based methods to digitally boost the classic study group (Chen, 2020). Another study showed the integration of Slack into their research team members. The result indicates that research professionals and their assistants have used app's usage heavily (Bao, 2020).

The impact of online format on quality discussion is another study on this issue and the result illustrated that students preferred to use of Voice Thread for preparing and learning from other presentations, which is the process of performing in the classroom to discuss presentation content (Rajab, Gazal, & Alkattan, 2020). A cloud-based clinical progression practice record has been compared to a traditional paper record to assess the ease of use, usefulness, and ease of learning. The results recommended that the first one is more useful, easier to use and more satisfactory than the second system. Participation, student achievement, coverage and quality are four important dimensions proposed and constructed framework to assess quality for massive open online course (MOOC), which help this organization to monitor and improve measurement. For enhancing online learning, online learner participation needs to be increased, which is suggested by (Kamali, & Kianmehr, 2015).

Another study revealed that the way of developing and delivering online ethics courses need to be rethinking, to encourage students to build their confidentiality in learning from engaging them in online active and cooperative experiences (Hrastinski, 2009; Asarbakhsh & Sandars, 2013). They believed that for reducing the negative effect of online education, it is important to provide suitable network environment, and students' perspective about online education need to be discussed (Hrastinski, 2009).

Since Zoom became a standard as a teleconferencing platform in teaching organizations more particularly during corona virus crisis, a few of private universities in the North of Iraq has adapted this platform as an alternative to face-to-face teaching (Holloway, Johnsen, & Syrbu, 2020). Hence, Major et al. (2020) revealed that Zoom has an impact on learning experience positively, because of direct communication among students and lecturers which is mostly like face-to-face teaching.

According to Rapanta et al. (2020) self-reflection and self-regulation is the most realistic method to adopt in universities for making student assessment to avoid online exam or online quiz because, students are most likely to cheat. Self-regulation is the required time and effort for students to organize themselves to adapt to the new learning condition. Self-reflection is piece of work written by the students to express what s/he learned through the sessions. Accordingly, the lecturer will understand whether the students have learned or regulated during the online sessions or not (Munoz & Mackay, 2019).

## **2.2 Student Satisfaction**

Student satisfaction can be defined as a desire from students created by the comparison between observed influence of a particular product or service with the expected value (Budur et al., 2019). Many studies on this field have been conducted and many models have been established by previous experts and scholars, which can be divided into macro and micro models.

Macro model refers to macroeconomic indicator to measure the degree of student satisfaction of a product or service. For this purpose, customer satisfaction index (CSI) put forward by focusing on post-purchase perception, customer expectation and purchase value. Deutche Kundenbarometer (DK) model have constructed in Germany which consisted of 31 industries. European Customer Satisfaction index (ECSI) have constructed by the European Union. Customer complaints have been omitted by this model whereas company image added. Hence, perceived quality divided into hardware and software quality. Micro model refers to the division of service quality which consists of five categories: reliability, assurance, tangibility, empathy, and responsiveness.

Özgen and Reyhan (2020) studied the students' satisfaction regarding online education and they pointed out that online learning can satisfy users through determining the quality and usefulness of the course, website services, platform value, and the level of estimated achievement. Similarly, Maqbool, Ismail, and Maqbool (2020) examined the factors that affect online learners' satisfaction which include: participation; course content; organization; methods of teaching; assessment; material resources; quality of delivery; learning environment; tutorials, and learning resources. Lastly, Raza, Khan, and Rafi (2020) revealed that most of the students join online courses through mobile phone. At this point, applications which have been developed only for mobile phones can be considered as a significant step regarding their satisfaction.

According to the above researches many studies about student satisfaction have been conducted and many models have been established in various countries. Although, the impact of online education according to methods and materials such as Zoom, a new software to watch offline videos, and communicate to lecturers have not considered by the previous studies. So far, this paper enhances the perception about the indicators that have been used separately in prior studies and establishes a satisfaction evaluation model by focusing on the aforementioned factors during the lockdown process of COVID 19.

### **2.3 Service Quality**

The difference between customers' experiences and expectations regarding to service can be known as a definition of service quality (Budur, 2018; Demir et al., 2020; Torlak et al., 2019). Student-centered approach can be used to attract several public interests for improving service quality in higher education (Pham, 2019). Basically, this strategy focuses on students as customers and universities required providing students with best educational services which lead to satisfying students and make them loyal to their university (Budur et al., 2018).

Another study was conducted in Malaysia to investigate students' e-learning experiences (Pham, Williamson, & Berry, 2018). Course design, instructor characteristics, learner characteristics, and institutional factors were considered by authors as four determinants of learning result and satisfaction. E-learning course design refers to course information, course organization, instructional objectives, and course layout, which result in boosting satisfaction and improving learning management system, and increasing learner's satisfaction with the system, if it is well designed. Thus, it would be appropriate to improve quality through learners' skills and knowledge (Mohammed et al, 2020; Khan & Yildiz, 2020). Oppositely, poorly designed courses do not lead to implementing e-learning successfully (Ozkan, & Koseler, 2009).

For adopting e-learning system in universities, instructors need to have formal training to use technological resources effectively. Thus, characteristics of instructors significantly affect e-learning quality, due to pedagogical, technological, and personal challenges faced instructors constantly. However, instructors' intention to adopt and use e-learning system is affected by inadequate internet connectivity and lack of computers (Paechter, Maier, & Macher, 2010).

Another factor that affects e-learning system is learner's characteristics which can be enhanced through using social media such as Facebook to integrate social and academic together and form interpersonal relationships strongly among staff, students, and their peers. Interactions among students and students'

recognition by lecturers might boost self confidence in this system. Hence, passing previous courses leads to create confidentiality in e-learning students (Parasuraman, Zeithaml, & Malhotra, 2005).

Institutional factor is another factor affects e-learning quality which includes culture, policy, funding, and technological infrastructure issues, that required adequate internet, strong operational e-learning policies, technical skills, and knowledge among teaching staff. Hence, lack of financial and technical support, low internet service, inadequate training courses, lack of e-learning skilled staff among academies, and cost of telecommunication services bring barriers to implement e-learning system (Hadullo, Oboko, & Omwenga, 2018). This scale which contributes to measurement and assessment of e-learning service quality improved in developed countries. Thus, this study fills this gap by developing this scale in Kurdistan Region of Iraq.

### **3. Methodology**

The aim of the study was to investigate student's perception about the online learning during the lockdown period in 2020. The lockdown has been applied between March and April in Sulaymaniyah city in different time periods, but schools have stopped normal education and started to give courses in online platforms like Zoom. In this respect, this research has conducted in Business and Management Department of Tishk International University (TIU) in Sulaymaniyah campus. In line with this, TIU was one of the pioneer education institutions that started online education in the region. Accordingly, university has used different tools to serve its students in this period such as; Mercury (specific software that students can follow lecture videos, assignment, and other related materials), Vimeo (video platform for the subjects), Zoom (online software to present live sessions), PIS (universities normal system that students can follow their marks and attendances), and Zipgrade (online exam platform).

Based on these different platforms and software, current paper has aimed to measure student's satisfaction in the department. Initially, a survey questionnaire has been proposed and applied in Likert style, which "1" means "I hate it" and "5" means "I love it". Some of the questions are as followed; "Experience with Zoom meeting platform", "Experience with Mercury System to follow your courses", and "Experience with PIS student System".

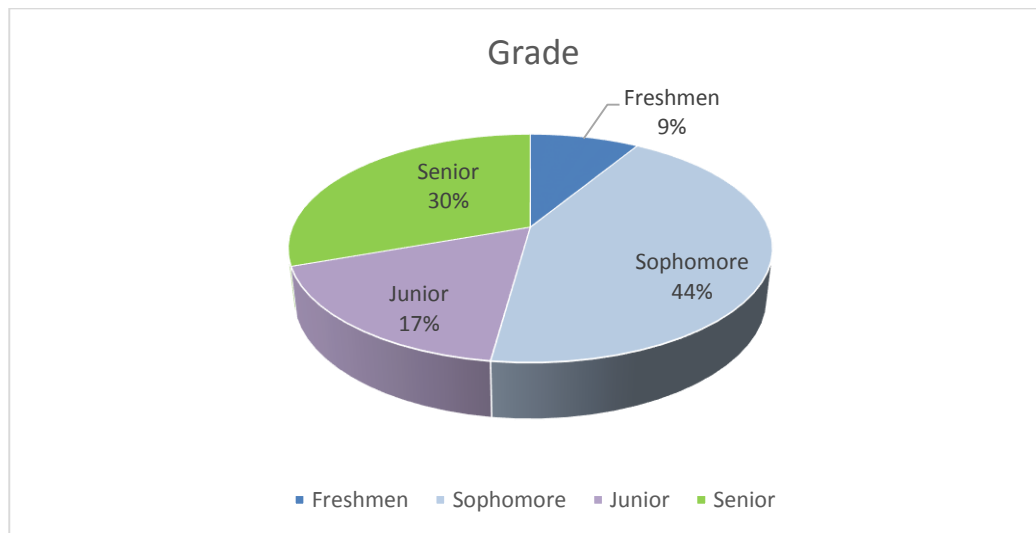


Figure 1: Grades of the students at the university

From Figure 1 it can be observed that 44 percent of the students who participated to the survey was from the second grade (sophomore), then followed by junior and senior level. Besides, 57% of the students were male, while 43% was female (see Figure 2).

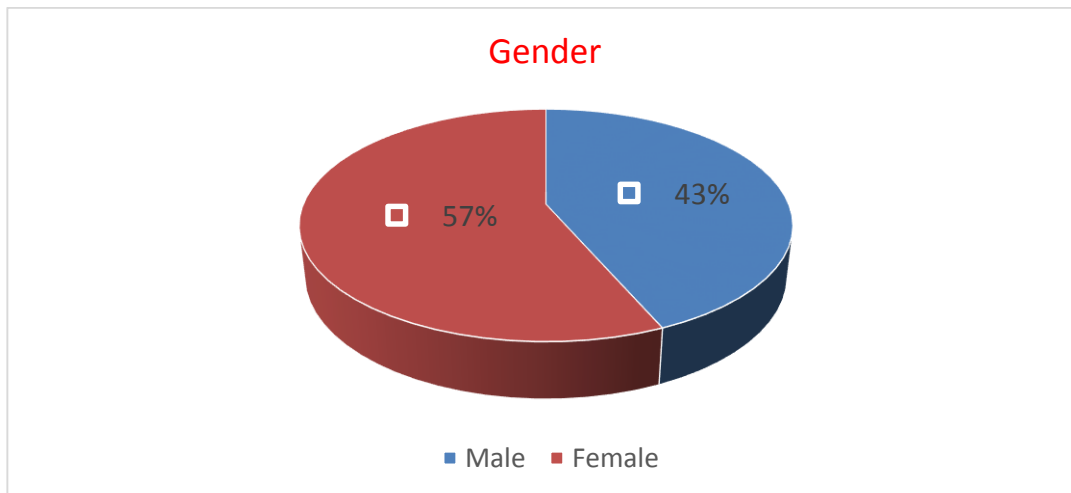


Figure 2: Gender distribution of the students

Further, Figure 3 gives information about the students experience with the Zoom meetings. The links for the meetings have been shared with the students through special groups that have been established in the social media. At the beginning they faced some problems to join the meetings even the lecturers had some difficulties because of the new system. But based on the trainings and separated meetings with the lecturers those problems have been solved. As seen from the figure, most of the students (39 percent) were satisfied with the zoom meetings. Besides, 31 percent do not have any positive or negative comments about the meetings, while 30 percent was not satisfied with online meetings (see Figure 3).

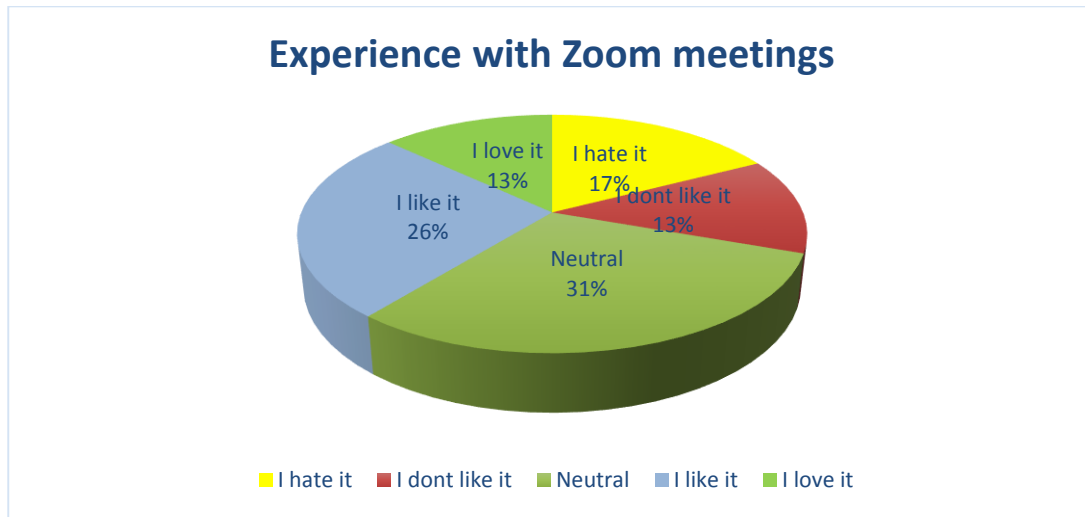


Figure 3: Students experience with the Zoom meetings

Furthermore, Mercury system have been used by the university to upload offline videos of the related subjects and to share assignments with the students. Besides, the system had the service to share online exams with the students. However, the exam system of the Mercury was not efficient to use properly. So far, it has been observed that 47 percent of the students did not like the platform, while 44 percent was satisfied with the services of the Mercury. In addition, 9 percent of the students have stayed neutral about the offline system (see Figure 4). It can be concluded that the satisfaction and dissatisfaction level of the students last equal.

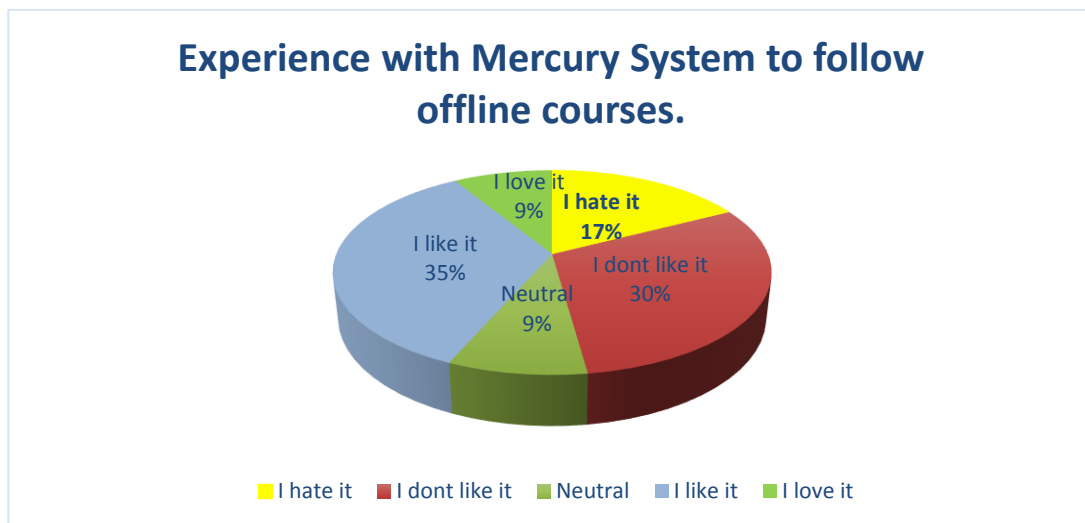


Figure 4: Students experience with Mercury system

PIS system is the online system that allows lecturers to enter attendancies and the evaluation crieteria of the subjects that they teach. Besides, the system contains the lecture sylabusses, curriculum, and other related materials for the students from the first year until their graduation. Based on the survey, it can be

observed that 48 percent of the students are satisfied with the system, while 21 percent do not like (see Figure 5).

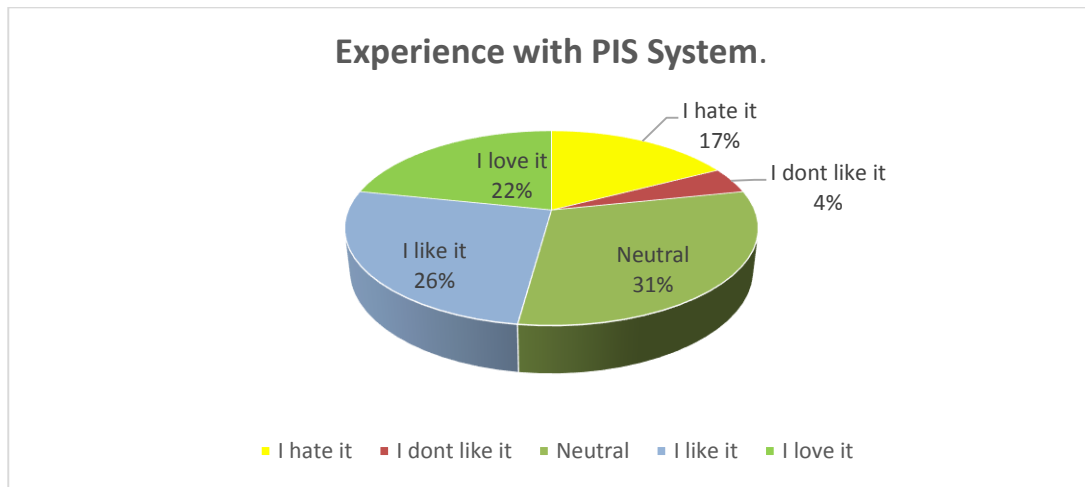


Figure 5: Students experience with the PIS system

Additionally, lecturers have used the ZipGrade online exam platform for making some quizzes. The system has different options to make online quiz within a limited time and limited questions. However, it's very easy to send answers to classmates during the exams. From that point of view, 56 percent of the students liked the system, while 21 did not like and 22 were neutral. The reason why they did not like could be that the GPA difference among the students would decrease because of sharing answers (see Figure 6).

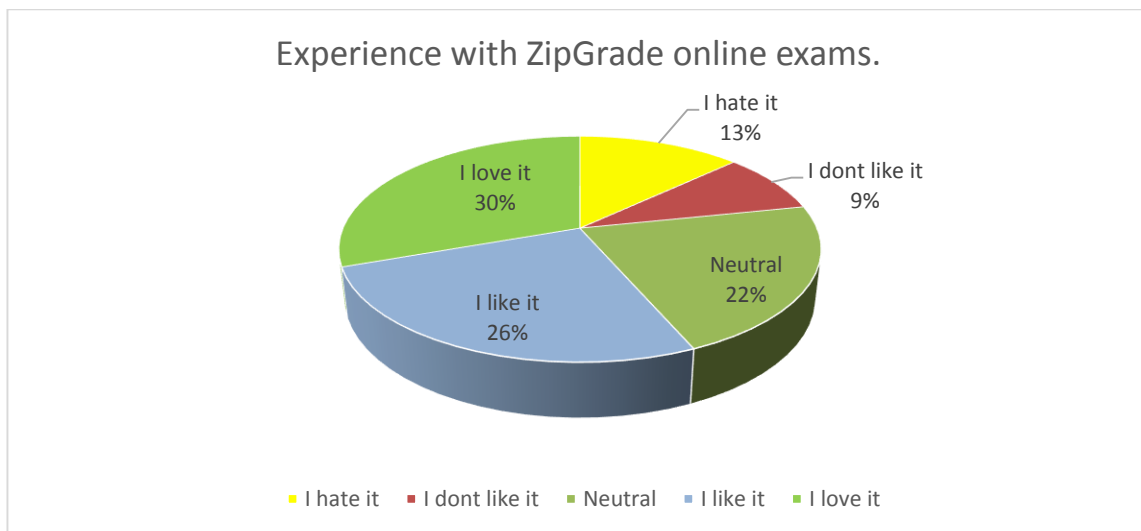


Figure 6: Experience with the ZipGrade

Besides, Figure 7 gives information about the perception of students from the live sessions. Hence, it can be observed that 35 percent of the students were satisfied, 22 percent were neutral, and 43 percent were dissatisfied with live sessions. Accordingly, their perception is in line with the results of the Figure 3 that



they don't want to have online courses whatever it is organized through Google Meets, Zoom or different providers. It's clear that most of the students do not want to have online education even during the pandemic time.

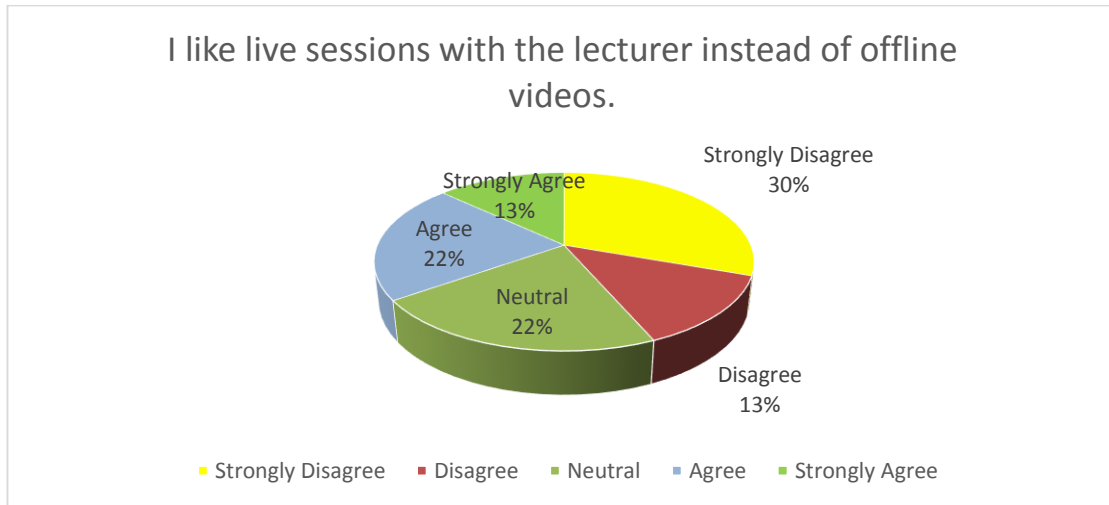


Figure 7: Students perception about the live sessions

Moreover, Figure 8 gives the results about the students' perception from their marks that they have received during the online education period. So far, 40 percent have received what they have expected, while 56 percent have got lower than they have expected. Again, students have revealed their dissatisfaction with the online education with their mark expectation from the subjects.

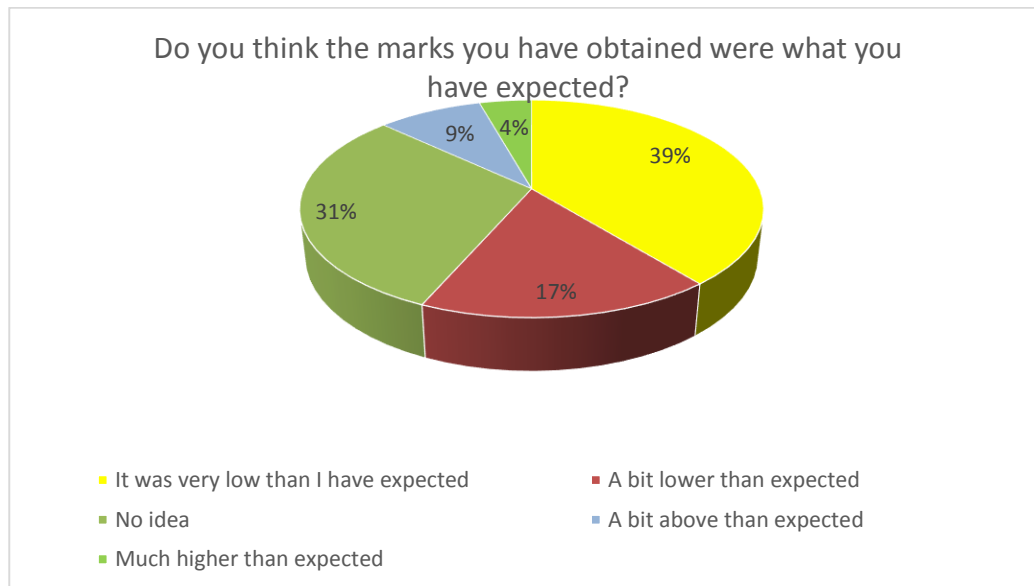


Figure 8: Perception about the marks during the online education

According to results of the Figure 9, it can be observed that students have positive perceptions about having homework instead of online exams (57 %). Further, 30 percent of the students prefer to have online exams, while 13 percent were neutral.

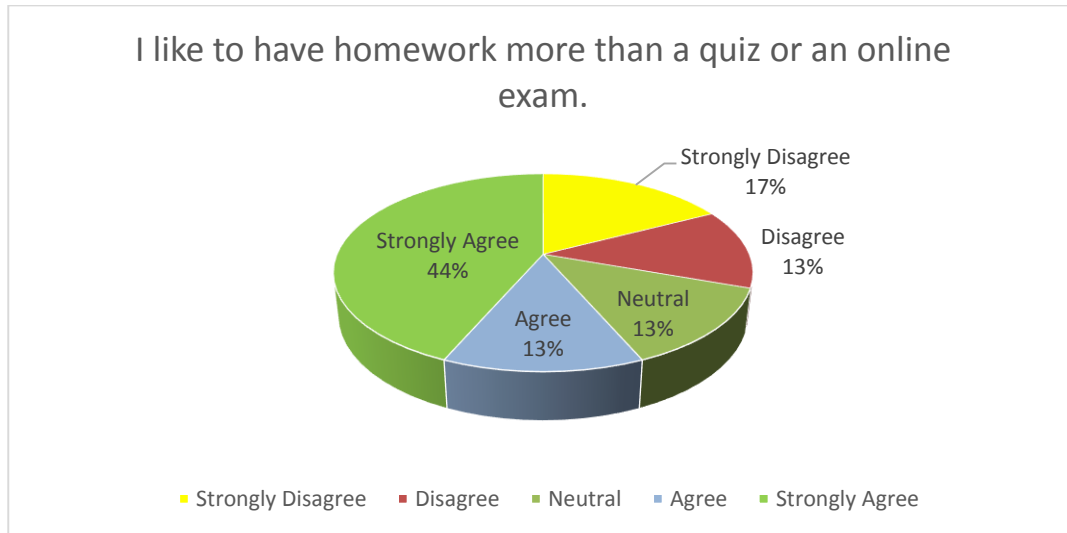


Figure 9: Students perception about the homework

Following these results, Figure 10 is in line with Figure 9 in that students have positive perceptions. They want to do good projects so that they can publish them in journals. Accordingly, 70 percent of the students want to do projects where they can transform their theoretical knowledge into practice. Consequently, it could be said the students have accepted the mission of the department that they want to do good projects even in the pandemic time.

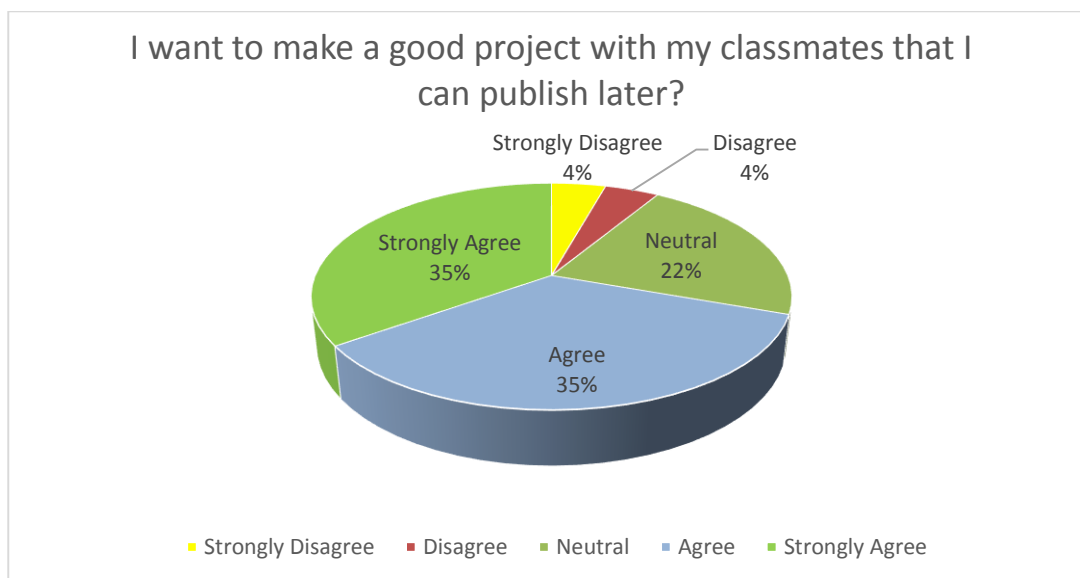


Figure 10: Students perception about the project and publication

#### 4. Conclusion and Recommendations

The aim of the research was to investigate student's perception about online education and online education materials during the lock down period in Sulaymaniyah city of Kurdistan. Accordingly, some questions have been conceptualized by the lecturers in the Business and Management Department in Sulaymaniyah and were applied through Google-forms.

According to results of the study, students in the department do not like to have online sessions and online exams. Instead, they are more familiar with short offline videos through a good and user-friendly platform. Besides, they want to do good projects and publish these projects in international journals. In line with this, at the end of the semester at about 15 projects from various grades have been published in different journals.

Consequently, based on these results administrative board of the university must consider students perceptions to improve online education system and tools to a higher level. Further, different kinds of dimensions related to student's satisfaction should be applied in other departments to understand students understanding and perceptions about the services that provided.

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