Information Seeking Behaviour of Distance Learners: What has Changed During the Covid-19?

Ryan Alturki†
rmturki@uqu.edu.sa
Department of Information Science
College of Computer and Information Systems
Umm Al-Qura University, Makkah, Saudi Arabia

Summary
All the aspects of human life have been affected by the novel coronavirus (Covid-19). It has rapidly spread in most countries including the Kingdom of Saudi Arabia. As a result, early precautionary actions aiming to minimise the virus effect are taken by the Saudi government. One of these actions is the sudden shift to online classes and suspending the attendees to all educational institutes. Such immediate change can have a significant effect on the educational process, especially for students. One can argue that students' information-seeking behaviour within the current situation can affect their learning quality and outcomes. Therefore, this paper examines the Saudi students' information-seeking behaviour by taking a sample of students from Umm Al-Qura University. A descriptive analysis is conducted with 193 students and two approaches are used to collect data, questionnaire and semi-structured interview. The results showed that the majority of students face difficulties when searching and retrieving e-resources from the university library website. The problems range from mainly poor User Experience (UX), network connection, multiple errors and lack of subscription with academic publishers.

Keywords:
information retrieval; covid-19; seeking behavior; distance learning; information literacy

1. Introduction

2020 will be definitely one of the hardest years within the current century. Over the last year, the human being lifestyle is changed due to the pandemic of the novel Coronavirus (Covid-19). The first case worldwide was diagnosed in Wuhan, China December 2019 [1]. The novel disease started to spread quickly around the globe, and it is almost hit the majority of the countries. Thus, and by the 30th of January 2020, the World Health Organisation (WHO) had stated that the Covid-19 is a worldwide health emergency [2]. Moreover, the Saudi Arabian Ministry of Health (MOH) on the 2nd of March 2020 had announced recording the first case within its citizen [3]. After this and in order to avoid the spreading of the virus in the country, the government had started to apply several early precautionary actions, for example applying social distancing, suspending the work of the majority of government agencies and lockdown cities [4]. After that and on the 8th of March, the Saudi government had even applied much more early precautionary actions that include suspending the attendees to all governmental and private schools and universities and shifting to online classes [5].
Schools in general and universities in specific are playing a significant role in order to improve information literacy and lifelong learning. The students' strong base for both intellectual abilities and professional developments is established by universities. The learning style and process are changed when compared to the previous years. In the past, students were relying on teachers to deliver information and to have a better understanding "Teaching-Centered" [6]. Currently, the learning journey is strongly dependent on the students themselves "Learning-Centered" as they are responsible to seek and access knowledge, improve their ability to solve problems and brainstorm issues [7]. These days, it is important for students to know how to learn, how to convert data into information and then improve their knowledge and later how to effectively turn such learned knowledge into ideas and applications to be implemented within life. The modern paradigm of learning has given priority to information literacy skills. To be more specific, seeking and finding information [8].

Currently and within the Covid-19 pandemic and leaving only the choice of applying online classes and suspending the attendees to all colleges and universities in Saudi Arabia, a few inquiries could be asked. Will the Saudi students be able to learn as they were learning before? What about their information-seeking behaviour? Will they be able to seek the right and required information to effectively finish their study and then improve their knowledge? Therefore, this paper aims to contribute by investigating the information-seeking behaviour of both undergraduate and postgraduate students at Umm Al-Qura University.

2. Literature Review

Students' behaviour in regard to information seeking is being a debatable topic recently because of the mass availability of data and information that can be retrieved [9].

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Thus, concerns were raised by researchers and academics as they wonder whether such widespread knowledge which can be reached by students will cause a fundamental shift in the way that they search for educational contents [10]. Moreover, scholars afraid that learners might be not able to clearly think and evaluate due to the over-usage of electronic resources which will have a negative effect on their learning credibility [11]. This is a significant concern for higher academic institutions [12].

Information behaviour, in general, is a wide term that covers all the aspects of seeking information. It also covers the information behaviour on its passive form or as it can be said in the undetermined form [13]. The behaviour of searching for information can be described as the interaction of elements between both the users and information systems [14]. Information seeking behaviour can be defined as "the purposive seeking for information as a sequence of a need to satisfy some goal" [15] "which could be triggered and impacted by the risk level, task complexity, and time pressure" [16].

In order to gain an effective experience in information seeking, people must be information informed. It is stated that individuals who are aware of information are those people who had learned the way to learn. This is because they are aware of the suitable method to organise knowledge. Besides this, their level in finding information is appropriate and they have the ability to use the found information in a way that other individuals can get to learn from them as well. In another word, they are the individuals who are well prepared and willing for lifelong learning since they have the ability to find the right and required information for performing a task or to make a decision [17]. There is a fundamental need for higher education students to have at least basic information skills which can help them to successfully identify, evaluate and then use information while they are studying [18]. This is due to the fact that the modern and developed educational curriculums for higher study are shifted towards a much more "Learning Centered" approach. In another word, it focuses on independent learning [19].

In the majority of times, the information-seeking behaviour for both undergraduate and postgraduate students is involving seeking information in an active or purposeful way. This is due to the fact that they are always required to complete writing an assignment, prepare to participate within a class discussion, present their findings to their classmates, positively contribute within a seminar or a workshop and of course to write their research thesis if they were postgraduate students or to prepare to their final exam if they were undergraduate students [8, 12]. While the students seek and use the information for studying, there is a big chance that they might be subjected to a variety of complex influences that ranges from personal factors to environmental ones. Such difficulties and issues were appeared because of the increasing and spreading of implementation the Information Communication Technology (ICT) within university education level and the emerging of electronic information resources. As a result of this, studies in the field of information seeking are now focusing on the factors that may have a direct effect on university students. Such factors contain information literacy, old or nonworking computers in university labs, common breaks in electricity supply, lack of space and computers in a university library and access to computer labs outside lectures hours [20-23]. Moreover, the lack of awareness in regard to the university's library services is another factor that might have a strong effect on the students' information-seeking behaviour [24]. However, universities' library can play a part in order to help students by marketing their services to make more of them aware of what available services that students can gain advantage from them while they are studying.

When both undergraduate and postgraduate students are studying, they try to use diverse information resources for numerous academic tasks. Online references, such as search engines and library databases are considered one of the most frequently used and this is especially when they asked to do a difficult academic task [25, 26]. Therefore, learning how to effectively and efficiently use them is a significant skill for students. Google in general and Google Scholar in specific are the most commonly used search engines by students to retrieve information. Google Scholar is considered as an Informational System (IS) which is an Internet search engine enabling to search for online academic references, for example, articles, books and abstracts from a variety of well-known academic publishers, scientific organisations and other academic associations [27]. There are several reasons that why higher educational students prefer to use Google Scholar as their first option when they want to retrieve information for their study. A recent study in which 138 students from the University of Patras, Patras, Greece had participated in a survey and the results indicated that they prefer to use such search engine due to their ease of use, usefulness and self-efficacy [28]. Besides this, another study in which 200 international postgraduate students (118 male and 82 female) who study in Manchester, England have participated in a questionnaire that asked them about their usage of Google Scholar. The results showed that they choose to use it because of its accessibility, visibility and self-efficacy [29]. In addition to this, 28 university students (15 postgraduate and 13 undergraduate) were participated in an individual semi-structured interview to complete a set of searching tasks using Google while their screens were recorded. Then, each was asked to fill out a post-task questionnaire to measure their satisfaction level regarding using Google. The finding concluded that students were satisfied with using it [30].

Therefore, it can be said that one of the ways to examine students' information-seeking behaviour start by measuring both the changes and the impacts which are appeared due to

the availability of modern information sources and their new applications that offers such resources. Furthermore, analysing students' information-seeking behaviour will additionally help to determine their requirements, expectations and their level of satisfaction when they use such information resources.

3. Umm Al-Qura University Profile

Umm Al-Qura University is one of the biggest public university in Saudi Arabia. The main campus is located in Makkah, and it has other four campuses in Al-Jamoum, Al-Leith, Adham and Al-Qunfudah. The university has been developing into a multi-faculty university with a total of 35 colleges and 121 departments. It offers courses in a variety of subjects that are manning by academics who has substantial teaching and researching experiences. Currently, there are more than 100.000 enrolled students and almost 5000 academic staff [31].

3.1 University Library

The university has one main library named "King Abdullah Library" and it has two branches, one in Al-Abdeyah campus, Makkah for boys and the other in Al-Zaher campus, Makkah for girls. Both of the branches have a collection of academic resources, for example, books, leading international and local journals. Besides this, there are 27 libraries for the colleges, for example, the library of the College of Applied Sciences [32]. The Deanship of Library Affairs has subscribed with a few international academic databases, such as UpToDate Databases, Lexicomp Database and ProQuest Databases [33]. Moreover, it provides free access to the Saudi Digital Library (SDL) which is the largest academic gathering of information resources. The SDL has over 310.000 full e-resources and over 300 contacts with leading global publishers, such as Elsevier, Springer and Routledge [34]. Through any of the 29 libraries at Umm Al-Qura University and the University website on the Internet, students, academic staff and employees can get access to these databases. Besides this, there is a variety of electronic services that the library provides, for example, ask the library specialist, book a quiet room, book a room for groups and more. Because of the current pandemic and in order to help the students with their study, the library provides an extra special service which is loaning tablets [35]. Moreover, the university library offers several training courses, such as managing in-text citation and referencing. In addition to this, there are various events and workshops that are determined within the academic calendar.

4. Scope

The scope of this investigation is focusing on analysing the information-seeking behaviour of both undergraduate and postgraduate students in several colleges at Umm Al-Qura University.

4.1 Participants

The participants within this study were 200 students. Table 1 below summarises the participants' information.

Table 1: Participants information

Gender	***Number of Participants***		
	Undergraduate Students	***Postgraduate Students***	***Total Number of Students***
Male	80	20	100
Female	80	20	100
Total	160	40	200

The participants were from nine different colleges that are based within the main campus at Makkah city. From each college, the number of male students is equal to the number of female students. In total, all the colleges have the same total number of students that participated in the questionnaire (10 male and 10 female) except for the College of Computer and Information Systems (20 male and 20 female). Figure 1 summarises participants number in regard to each college.

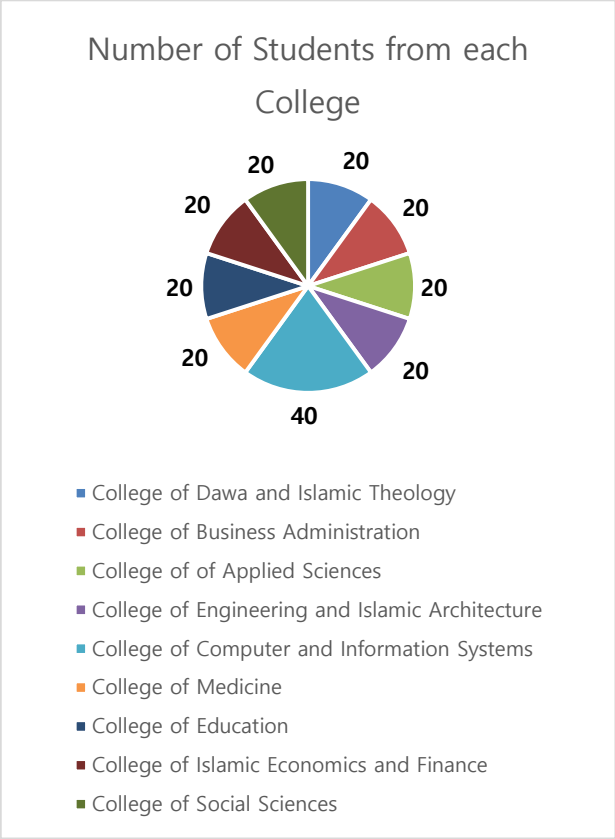

Fig. 1 Number of participants from colleges.

The postgraduate students were only from specific colleges as some of the colleges only provide undergraduate courses. See figure 2 below.

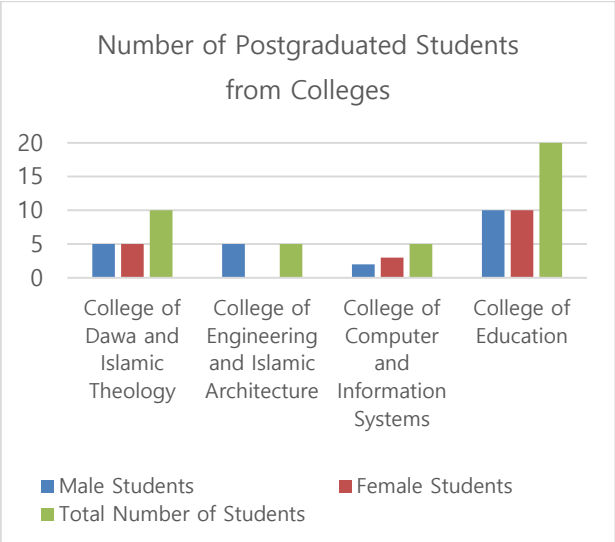

Fig. 2 Number of postgraduate students from colleges.

5. Methodology

A descriptive kind of method was applied for collecting the data of this study. A descriptive study usually has the aim to find out "what is". Therefore, a variety of approaches to collect data, such as observation, interview and questionnaire are often applied in order to collect descriptive data [36, 37]. A well planned and applied descriptive study can result in yielding rich data leading to significant recommendations. For instance, a recent study at the Imam Abdulrhman Bin Faisal University, Dammam, Saudi Arabia has drawn several reasonable conclusions in regard to their new online academic services system that aims to support students getting help and advice with their study during the current pandemic [38]. It is possible to apply either a single approach or several combinations of methods in order to collect data within a descriptive study based on its research questions [39]. In this study and in order to collect the data, two approaches were applied, which are a questionnaire and a semi-structured interview. The questionnaire was created and distributed through Google Forms.

Even though it is recommended that a questionnaire must include several open-ended questions allowing participants to raise their ideas or concerns, there is a high chance that an effective number of participants might not spend some time to in-depth answer such questions. Besides this, there is even a little chance that some participants may not be able to complete or correctly answer the questions as they might face difficulty in understanding the instructions of the open-ended questions. Thus, a straightforward and well-framed format allowing researchers to simply review participants' responses in regard to a survey is seen as an excellent option. However, it is important to give participants the chance to freely express their opinions, comments or concerns which in this case will not be possible because of only using close-ended questions. Therefore, the last question within the survey was asking participants whether if they are willing to participate within a semi-structured interview to elaborate more details, suggestions or concerns. Such interview will be done via phone call or online call which will be audio recorded

The semi-structured interview is laid between the two types of interviews (structured and unstructured). In such type of interview, the respondent and interviewer engage in a formal interview. The interviewer follows a formal guide but sometimes follows the topical trajectories, which may stray from the guide [40]. It is best to use semi-structured interviews when the interviewer only has one chance to interview the respondent and when there are several interviewers collecting the data [41]. Semi-structured interviews overcome the drawback of structured interviews as they allow for more elaboration. They also overcome the

drawbacks of unstructured interviews as they provide guidelines on what should be discussed and achieved throughout the interview. The open-ended questions provide the opportunity to determine new ways of understanding and gaining a new perspective on particular topic [40]. These interviews provide comparable and reliable qualitative data. Hence, semi-structured interview was selected to be conducted.

5.1 Questionnaire

The analysis in regard to the data determined that the overall response rate was 96.5% (193 students). See figure 3.

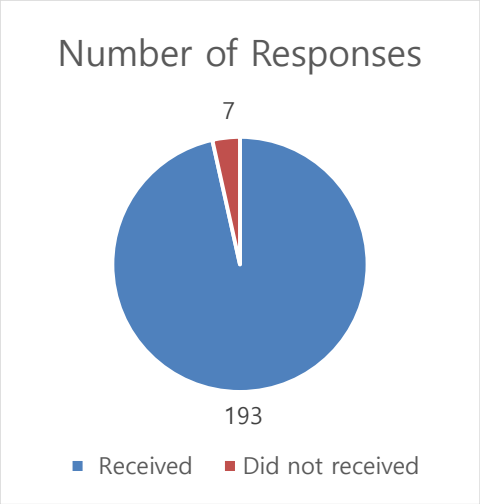

Fig. 3 Number of responses.

The findings from the questionnaire are categorised into the following themes:

1. Gender Response Rate

The male response rate was 97% (97 students) whereas the female response rate was 96% (96 students).

2. Preference for Using Resources

A big number of students prefer to use e-resources instead of printed ones. Responses indicated that a majority of 131 Students (67.87%) prefer to use electronic resources over the traditional ones. See table 2 below.

Table 2: Preference for using resources

Format	***Number of Students***
Electronic	131 (67.87%)
Print	62 (32.12%)

3. Time Spent on Browsing

According to the received responses, it is clear that the time which students spend browsing differs a lot. The majority of students browse daylily the Internet network in general for 2 – 4 hours. Besides this, a smaller number of students had reported that they spent 6 hours or even more in a day browsing the web. However, it cannot be ignored that a big number of students stated that they do not spend much time surfing the net. Table 3 below specifies the time spent by students on browsing.

Table 3: Students' browsing time

Time Spent	***Number of Students***
Less than 2 hours	49 (25.38%)
2 – 4 hours	72 (37.30%)
4 – 6 hours	43 (22.27%)
More than 6 hours	29 (15.02%)

4. Awareness for Using e-resources

The majority of students (52.84%) pointed out that they know how to use e-resources by themselves. Moreover, 24.35% of students stated that they learn the right way for using electronic sources because of the help of their colleagues or professors. In addition to this, a small percentage of students (7.77%) reported other ways to be aware of using such resources. The remaining students said that due to attending paid workshops which were organised by some private academic institutes, they knew several ways for using them. See table 4 below for information in regard to how students become aware of using e-resources.

Table 4: Awareness for using e-resources

How they Become Aware	***Number of Students***
By themselves	102 (52.84%)
Colleaagues / professors	47 (24.35%)
Private institutes' workshops	29 (15.02%)
Other	15 (7.77%)

5. Purpose for Using e-resources

The results have divulged that almost 70% of students used electronic sources for research purposes. Likewise, around 20% reported that they usually access to e-resources as they want to keep their knowledge updated in term of the subjects in which they are currently enrolled to improve their academic performance. Lastly, the residual who participated had other reasons for accessing such resources. See table 5.

Table 5: Purpose for using e-resources

Purpose for Using E-resources	***Number of Students***
Researching	134 (69.43%)
Knowledge updating	38 (19.68%)
Other	21 (10.88%)

6. Access Points

Most of the participated students specified that they always choose to access utilizing remote login feature. Next, it was indicated that a group of students prefer to have the ability to use the department facilities as an access point to reach electronic sources. Following this, a small number of students are in favour of using the university libraries' equipment. Table 6 gives the number and percentage of students in regard to the preferred access points.

Table 6: Access points

Access Point	***Number of Students***
Remote loging	151 (78.23%)
Department's facilites	37 (19.17%)
Libraries' equipment	5 (2.59%)

7. Access Devices

A significant number of students (52.84%) determined that they prefer to use mobile phones as an access device to reach e-resources. Also, using tablets came the next favourite device followed by computers as it is shown in table 7.

Table 7: Access device

Access Device	***Number of Students***
Mobile Phone	91 (47.15%)
Tablets	57 (29.53%)
Computer	45 (23.31%)

8. Tools Used for Searching

Based on the responses it is evident that an extremely big number of students search for electronic resources via using search engines. This result supports the works done by [25, 26]. Moreover, the students clearly signified that as in figure 4, Google is the most preferred used search engine as more than 70% of responses selected Google compared to other search engines, for example, Bing and Yahoo. Also, this finding is in line with the studies done by [28, 30]. However, the second-highest tool for searching was databases followed up by the university library website as is shown in table 8.

Table 8: Tools used for searching

Access Tools	*Number of Students*
Search engine	127 (65.80%)
Databases	43 (22.27%)
University library website	23 (11.91%)

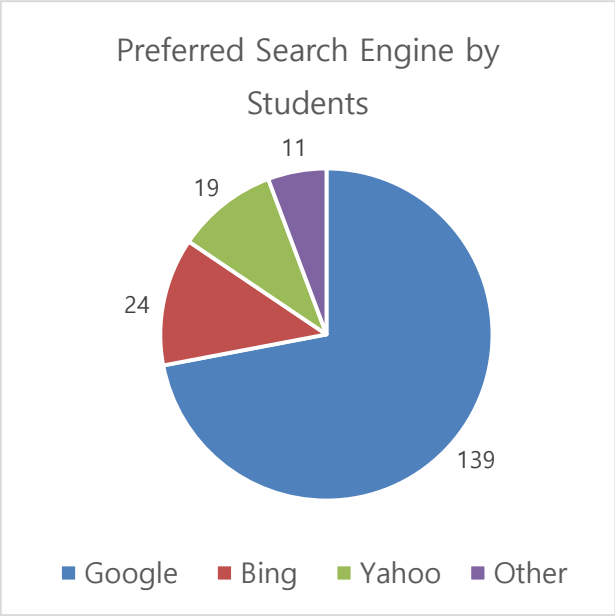

Fig. 4 Preferred search engine by students.

9. Problems Faced when Using the University Library e-resources

Several issues related to mostly the User Experience (UX) were reported by students which negatively affect their ability to retrieve electronic resources. According to a recent study, UX is the "expectations and reactions of an individual arising from the usage or expectation of service, device or system" [42]. UX is believed to be a key aspect that affects the success of a product and therefore it should be considered while designing either services or products [43]. The majority of the responses stated that the university library website was not easy to be used. In another word, it has a low level of usability. Usability can be defined as "the effectiveness, efficiency and satisfaction with which a specified set of users can achieve, in a specified set of tasks in a particular environment" [44]. A website's usability level and content are seen as the main aspects which determine its acceptability among users [45, 46].

Besides this, it was indicated that the university library did not have enough subscription with leading academic publishers which negatively affect the students' ability to retrieve numerous e-books and e-journals. Likewise, a number of students raise a complaint related to the website performance in general. As it is shown in figure 5, network connectivity, long loading time and slow response are the major issues that were highlighted. Table 9 below summarises the problems faced by students.

Table 9: Problems when used library website

Problems	*Number of Students*
User experince	87 (45.07%)
Academic publisher subscription	36 (18.65%)
Website performance	70 (36.26%)

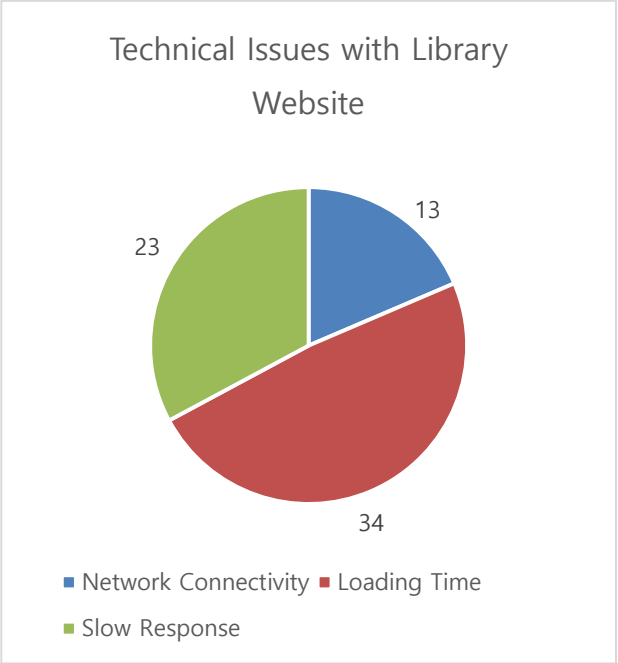

Fig. 5 Technical issues with library website.

10. Satisfaction Level with the Library e-resources

The students were asked to rate their satisfaction level with regard to the e-resources that are available to be retrieved by the university library. There are numerous rating scale systems which can be implemented to measure user's satisfaction level, for example, some have a rating scale of 7 whereas other has a rating scale of 5 or even 4. A recent study at the Solapur University library has measured the students' satisfaction level in regard to the library's resources and services and it used a 5-point rating scale [47]. Therefore, and in this study, the question has a rating scale of 5 where 1 is very satisfied and 5 is very dissatisfied. After analysing the results, it was clear that unfortunately, the majority of students were very dissatisfied as is presented in table 10.

Table 10: Students satisfaction with library e-resources

Satisfaction Level	***Number of Students***
Very satisfied	21 (10.88%)
Satisfied	37 (19.17%)
Neutral	41 (21.24%)
Dissatisfied	33 (17.09%)
Very dissatisfied	61 (31.60%)

11. Satisfaction Level with the Library Administration and Services

Following up the same rating scale system and when the responses were received and examined, the same pattern was found as the previous theme with the majority of students were very dissatisfied. See table 11 for more details.

Table 11: Students satisfaction with library administration and services

Satisfaction Level	***Number of Students***
Very satisfied	14 (7.25%)
Satisfied	27 (13.98%)
Neutral	37 (19.17%)
Dissatisfied	42 (21.76%)
Very dissatisfied	73 (37.82%)

5.2 Semi-Structured Interview

As it was mentioned before, the distributed questionnaire amongst the students only includes close-ended questions and yet it is important to give the students a chance to freely speak any notes, recommendations or fears. Consequently, the last question was asking them if they agree to be a part of a semi-structured interview through a phone call or online call which be audio recorded. Out of 193 responses, only 28 students (17 male and 11 female) whose represent 14.50% agreed to participate in the interview.

In order to represent the findings in an effective way, visual aids, for example, a word cloud was created depending on the data that was gathered via interviews [48]. A word cloud not only gathers words' amount and frequency, but phrases that are used as well and then it displays them via the size of the font. To be more specific, the more a word or a phrase is used, the bigger the font size is displayed [49]. It generally is utilised in a variety of settings, such as social and commercial ones. Though, it also has a practical use within analysis since it provides a rapid mean in order to analyse textual data and decrease bias [50].

The findings from the interview are categorised into the following themes:

1. Why Students were Dissatisfied

All the interviewed students pointed out that using the library website was not that easy and they ended up spending much time just to get to know the correct way to search for an article. One of the students said, "*It's so complicated.*" Besides this, several students did not like the overall design of the website as one of them stated that "*The website is like the old sites. You know, those which has a traditional design.*" Moreover, the website's colour schemes were also one of the aspects that are disliked by participants. It was said that "*Too many colours. You have green, white, yellow, black, grey and so many more.*" In addition to this, concerns were raised in regard to the lack of subscription to academic publishers. A student said that "*I was after a specific article and couldn't find it through the library website.*" Other students also said "*I use Google Scholar for searching usually and many times there are articles that require me to have a subscription to read it. So, I search for it by the library database, and it happened to me many times a message appears to me saying that no results were found*." Furthermore, numerous students reported many problems in terms of the library website performance. One said "*Many times, it didn't work with me. It says unexpected error happened*." Another student stated that "*I've seen this message frequently, failed to connect to the server.*" Also, several students complained about the loading time while the website is searching for e-resources. It was said that "*it's super slow." Another said, "Why it takes a long time to search*." Figure 6 below shows the most

mentioned words and phrases in regard to why students were dissatisfied with the university library website.

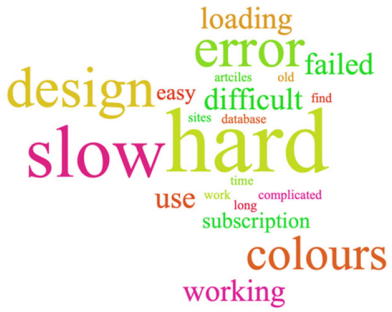

Fig. 6 Words and phrases regarding why students were dissatisfied about the university library website.

2. Suggestion for Improvement

All the participants within the interview recommended that the website should be much easier and clearer to be used. A student said, "*It should be easy to be used*." Another student said, "*Improve it so that it's very easy for using it*." In addition to this, several students recommended making the navigation steps for e-resources searching on the website much shorter. It is said that "*From the homepage screen, add a search bar instead of navigating through several screens and clicking on many links and then start my searching*." Moreover, various students suggest that redesign the website is a key point that will help to improve its acceptance among students. It was said that "*Design it like the famous websites*." Also, other student said "*There are several great designs that well-known websites implemented them. It's easy, do like them*." In addition to this, several students recommended that the website's colour schemes must be changed. A student said, "*Use a simple colour scheme*." Other said, "*Look at Twitter or Facebook website, they use a few colours and mostly one main colour which is blue*." Furthermore, it was advised that provide more subscription with leading academic and scientific publishers. One of the students pointed out that "*When I search for an article, I should have access to it*." Also, it is said "*The university must subscribe with the famous academic publishers, for example, IEEE or ACM and more. There is no need to first navigate to the library website, then access the SDL site and then see whether SDL provide access to them or not. The subscription contracts must be reviewed and updated on a regular basis as new publishers might appear*." Likewise, many suggestions were about improving the website performance. One reported that "*I don't want to frequently see error messages when browsing the library site*." A student also said that "*The website must be fast. It shouldn't spend much time when searching for articles*." Figure 7 below shows the most mentioned words and phrases in terms of the university library website's aspects that students recommend being addressed in a future version of the library site.

Fig. 7 Words and phrases regarding what students recommend improving in the university library website

5.3 Discussion

In general, the majority of students prefer to use e-resources over printed ones. Besides this and on average, more than half of the students (62.69%) spend a maximum of 4 hours a day browsing the Internet. Also, most of the students stated that they prefer using their mobile phone instead of other devices as access device while searching for e-resources. When students were asked about the reasons for using electronic resources, 134 students (69.43%) declared that they use them for research purposes.

Based on the analysed results, it is clear that most students were dissatisfied regarding the university library in general. To be more specific, almost half of the participated students (94 students) whose represent 48.70% are disappointed with the university library e-resources. Also, 115 students (59.58%) are unhappy with the library administration and services.

The reasons for this are varied started from unsatisfactory UX to operation errors. Such factors led students to use other tools to search for e-resources. Out of 193 students, only 23 students (11.91%) use the university library website for searching to meet their academic requirements.

The university library website as it is concluded need to have an improvement from a variety of aspects. Also, such improvement needs to keep in mind the interaction with a mobile phone. One of the ways to improve the library UX on the mobile phone is to conduct usability testing. It has been proven that a high level of usability improves UX [51-53]. Usability primarily has three key attributes which are effectiveness, efficiency and satisfaction. Other attributes such as learnability, memorability, cognitive load and errors are recommended to be covered while performing usability testing [54]. In addition to this, usability testing environment, techniques and metrics are vital elements that

should be identified and controlled in order to raise the success rate of the test [55, 56].

6. Conclusion and Future Work

Since the pandemic of the novel Coronavirus (Covid-19), the world has changed. People around the world forced to stay at homes, avoid gathering with friends and families and governments have suspended the work of several governmental and private sectors. The Kingdom of Saudi Arabia was one of the first countries which announced several early precautionary actions including shifting to online classes within all governmental and private schools and university and asking students, administrators and academic staffs to continue their educational process from homes. In the current situation, concerns were raised wondering whether students will be able to effectively learn as before? What about their ability to retrieve the right and needed resources to complete their study? Both of these questions are related to the students' information-seeking behaviour. Therefore, this paper aimed at examining such behaviour by performing a descriptive analysis involving students from Umm Al-Qura University.

A total of 193 students from several colleges participated in this study. Two approaches, which are questionnaire and semi-structured interview are applied to collect data. The results from the survey were categorised into 11 themes. Following this, 28 students agreed to be a part of the semi-structured interview to elaborate more about any details, suggestions or concerns. Based on the students' responses from the survey and the conducted interview it concluded that most of the students are in favour of using e-resources. Besides this, the majority of students declared that they prefer to use their mobile phone to search for such resources. However, they highlighted obstacles regarding retrieve e-resources from the university library. One of those problems which were identified by the majority of students is poor UX. Yet, several studies state that improving UX can be done by conducting usability testing as a high level of usability lead to a better UX. Therefore, further study in terms of testing the usability of the university library website is recommended to be done with the participated students to investigate the factors causing unsuccessful UX.

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