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RESEARCH ARTICLE

Students' Satisfaction Of Online Learning In Oman [version 1; peer review: 2 approved with reservations]

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Abstract

Background: Due to the development facilitated by modern technology, the world has become a small village with instantly changing methods of education. Online education has become an alternative method for course delivery used by colleges and universities globally.

Methods: The population of this study was N=564 students enrolled in asynchronous online learning at the College of Sharia Sciences in the Sultanate of Oman for the academic year 2020-2021. The survey instruments from "The Student Satisfaction Survey" developed by Strachota (2006) were utilized in this study. The survey included items in the following categories: demographics, learner instructor's interaction, learner-peer interaction, and lastly general satisfaction. The researcher reformulated the questions to suit the target group and some questions were changed to suit the target audience.

Results: Remarkably, the data show that there is no direct relationship between demographic factors and student satisfaction with asynchronous online learning. On the other hand, there is a strong and noticeable relationship between students' satisfaction with asynchronous online learning and student-instructor interaction. There is also a correlation between students' satisfaction with asynchronous online learning and student-peer interaction.

Conclusions: The students of the College of Sharia Sciences are on the whole very satisfied with asynchronous online learning; they consider it a very successful experience and recommend its use by students in other educational institutions.

Keywords

Asynchronous online learning, Oman, Students' Satisfaction

Open Peer Review

Approval Status

1

2

version 2

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version 1

26 Jan 2022

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2. **Norah Mansour Almusharraf** , Prince Sultan University, Riyadh, Saudi Arabia

Any reports and responses or comments on the article can be found at the end of the article.

This article is included in the **Research Synergy**
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Author roles: **AL-OMAIRI ARA:** Conceptualization, Data Curation, Formal Analysis, Investigation, Project Administration; **HEW SH:** Funding Acquisition, Supervision, Validation

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Introduction

Singh Kaurav, Rajput, and Baber (2019) emphasise that online learning is the replacement of traditional methods of teaching and the absorption of technology where students have the independence to learn at their own pace and space. Two main types of online education are cited: synchronous learning and asynchronous learning. According to Staff (2018), synchronous learning occurs in real-time, which means that students, their classmates, and their instructors interact in a particular virtual location through a specific online medium at a specific time. Asynchronous learning, on the other hand, occurs according to individual students' schedules. While the course instructor provides reading materials, presentations of lectures, assignments, and assessment tests, students can reach and fulfill these requirements in a flexible time framework. According to Dziuban et al. (2015), higher education institutions and universities emphasize the importance of student's satisfaction with the educational experience as it is considered one of the main elements in determining the quality of academic programs. Educational institutions seek good reputations reflected in the impression and view of students about their academic experience in these institutions. Accordingly, academic institutions in the Sultanate of Oman need to encourage students to use online learning and to increase the number of students who enroll in asynchronous courses, as it depicts the latest and optimal method of learning with the advent of technology and its effect in different spheres of our life. Since there is no consensus on specific elements that measure the degree of satisfaction with online learning, it is very important to study the effect of different demographic characteristics in students' satisfaction on online learning, as well as the effect of the students' interaction with the instructor and other students involved in online learning. Thus, this study will serve to be a reference for the College of Sharia Sciences in particular, and higher education institutions in the Sultanate of Oman in general, regarding the benefits of online learning. The results this study yields will also enable faculty members and administrators in the College of Sharia Sciences to enhance students' satisfaction with the online learning environment, which should lead to improvements in student retention in online courses.

Methods

The researcher used a quantitative research method for data collection - an electronic survey. According to Goertzen (2017) quantitative research methods are concerned with collecting and analyzing structured and digitally represented data, as one of their central goals is to build accurate and reliable measurements that allow statistical analysis. Saleh and Bista (2017) reported that in the past three decades, online surveys have become the dominant method for attracting participation in academic research for an easy response, rapid response, and low cost. Thus, surveys allow the researcher to collect information related to the subject of the survey, when the researcher is not able to directly observe the phenomena, when the study sample is located in a remote location, or when the researcher faces difficulty in directly communicating with the study sample. Consequently, this study is based on an online survey in order to obtain high response rates, and thus reliable and generalizable results.

The researcher chose to conduct this study at the College of Sharia Sciences because it is the only college in the Sultanate of Oman that teaches asynchronous online learning. The researcher chose this university because it facilitated the process of data collection; it allowed the researcher to obtain data on the number of students who enrolled in online learning and was ready to spread the invitation to participate in the research study through the college's online learning unit and using the college's platform. The sample was drawn from all students who enrolled in asynchronous online learning. Samples were taken from the various degrees offered by the college, namely diploma, bachelor's and master's, in order to find out if there is a difference between these groups with regard to their satisfaction with the asynchronous online learning environments. The total number of students in the college involved in online learning for the 2020-2021 academic year is 3649 male and female students, 463 of which are diploma's degree students, 3022 are bachelor's degree students and 164 are master's degree students. Students (see Appendix 1) are given two weeks to complete the survey. The questionnaire link was sent via an SMS message by the college's online learning unit, uploaded to the college's platform, and the questionnaire was also published on the college's social media sites.

The survey instruments from "The Student Satisfaction Survey" developed by Strachota (2006) were utilized in this study. At the beginning of the survey, the Researcher included a statement on ethics approval and consent to ensure all participants agree to be part of this study. The survey included items in the following categories; demographics (added to the survey by the researcher), learner-instructor interaction, learner-peer interaction, and general satisfaction. The researcher added the sentence "I am satisfied with online learning because" before each section of interaction to ensure students understood the survey. In the last section of the survey, "general satisfaction", the researcher also reformulated the questions to suit the target group. Some questions have also changed to suit the target audience.

Results and analysis

Table 1 shows Gender, age, marital status, employment obligations, student status, and current academic program were the main demographic factors investigated using descriptive analysis in this research. Gender as the first demographic

Table 1. Questionnaire results for the first question.

Characteristic	Satisfied	Dissatisfied
Gender		
Male	89.9%	3.5%
Female	82.4%	5.9%
Age		
Between 17 to 25	79.1%	7.4%
Between 26 to 35	84.5%	6.0%
Between 36 to 45	88.7%	2.3%
Above 45	92.6%	3.7%
Marital status		
Single	77.4%	7.3%
Married	88.5%	4.0%
Employment obligations		
Unemployment	82.8%	4.4%
Full-time employment	88.7%	4.9%
Part-time employment	88.5%	7.7%
Student status		
Full-time	86.5%	3.3%
Part-time	85.0%	6.6%
Current Academic Program		
Diploma	84.9%	6.6%
Bachelor	85.3%	4.6%
Master	91.8%	2.0%

factor reveals that males (89.9%) were a little more (7.5%) satisfied with online learning than females (82.4%). There were also a few differences between different age groups in regards to satisfaction with online learning. Students above 45 years (92.6%) were the most satisfied with online learning. The students least satisfied with online learning were students between 17 to 25 years of age (79.1%). Marital status shows a slight difference in percentage (11.1%) between married (88.5%) students' satisfaction with online learning as opposed to single (students (77.4%). With regard to employment obligations, there is a 0.2% difference in percentage between full-time employed (88.7%) students' satisfaction with online learning and that of part-time students (88.5%). Similar to employment obligations, student status reveals a slight difference (1.5%) in percentage between full-time students' satisfaction with online learning (86.5%) compared to part-time students (85.0%). The sixth and final demographic factor, current academic program, shows that Masters' students (91.8%) were the most satisfied with online learning. Students pursuing their Bachelor Degrees come next (85.3%) with a 0.4% difference in percentage from Diploma students (84.9%).

Table 2 shows that most of the students (82.6%) were satisfied with online learning because the instructor had been an active member of the discussion group and provided guidance for the posted comments, while only 5.3% of students were dissatisfied on this measure. Also, it shows that most of the students (76.4%) were satisfied with online learning because the comments from the instructor regarding assignments, projects, and any queries were timely in this online learning, (6.5%) dissatisfied). It showed that most of the students (57.5%) were satisfied with online learning because learners were able to obtain individual attention from the instructor when needed, (14.8%) dissatisfied). It also showed that most of the students (73.1%) were satisfied with online learning because the instructor always gives him valuable feedback on the subject and the tasks that they must complete, (8.7%) dissatisfied). Also, most of the students (77.6%) were satisfied with online learning because the teacher acted as a facilitator of the course by constantly encouraging communication, (8.5%) dissatisfied). It showed that most of the students (78.1%) were satisfied with online learning because although they saw the teacher in limited online discussions, they didn't feel isolated, (7.4%) dissatisfied). Most students (79.3%) were satisfied with the level of instructor interaction that happened in this online learning, (5.7%) dissatisfied). Also, the majority of the students (62.1%) were satisfied with online learning because the online discussion board provided an

Table 2. Questionnaire results for the second question.

	Item	Satisfied	Dissatisfied
7	In online learning, the teacher has been an active member of the discussion group and provides guidance for the posted comments.	82.6%	5.3%
8	The comments from the instructor regarding assignments, projects and my queries were timely in this online learning.	76.4%	6.5%
9	I was able to obtain individual attention from my instructor when needed. My instructor is very helpful on this matter.	57.5%	14.8%
10	The instructor always gives me valuable feedback on the subject and the tasks that I must complete.	73.1%	8.7%
11	In online learning, the teacher acts as a facilitator of the course by constantly encouraging communication.	77.6%	8.5%
12	Although I saw the teacher in limited online discussions, I didn't feel isolated	78.1%	7.4%
13	I am satisfied with the level of teacher interaction that happened in this online learning.	79.3%	5.7%
14	In this online learning, the online discussion board provided an opportunity to solve problems with peers.	62.1%	13.0%
15	This course created a sense of community among peers.	73.2%	9.8%
16	In this online learning, I was able to discuss my thoughts and ask clarification from peers when needed.	76.8%	9.6%
17	I received timely (within 24-48 hours) feedback from peers in this online class.	68.6%	11.7%
18	This online learning encourages students to discuss ideas and concepts with peers.	76.3%	9.7%
19	In this online learning, teamwork is an essential part of my activities	60.6%	19.2%
20	I am satisfied with the level of peers' interaction that happened in this online learning.	77.7%	7.8%
21	Overall, I am very satisfied with this online course.	85.8%	4.7%
22	I would recommend this course to others.	82.6%	5.9%

opportunity to solve problems with peers, while (13.0%) were dissatisfied). Also, it showed that most of the students (73.2%) were satisfied with online learning because online courses created a sense of community among peers, (9.8%) dissatisfied). Moreover, it showed that most of the students (76.8%) were satisfied with online learning because students were able to discuss their thoughts and ask clarification from peers when needed, (9.6%) dissatisfied). Most of the students (68.6%) were satisfied with online learning because they received timely (within 24-48 hours) feedback from peers in this online class, (11.7%) dissatisfied). Also, most of the students (76.3%) were satisfied with online learning because this online learning encouraged them to discuss ideas and concepts with peers, (9.7%) dissatisfied). It showed that most of the students (60.6%) were satisfied with online learning because, in this online learning teamwork was an essential part of their activities, (19.2%) dissatisfied). Also, most students (77.7%) were satisfied with the level of peer interaction that happened in this online learning, (7.8%) dissatisfied). The majority of the students (85.8%) were satisfied with online learning, while (4.7%) of students were dissatisfied with online learning. It is important to note that (82.6%) of learners would recommend the online course to someone else, while only (5.9%) of learners will not.

Discussion

This study identified the following questions:

1. Do demographic characteristics (Gender, Age, Marital status, Employment obligations, Student status, and Current Academic Program) affect students' satisfaction with online learning from the viewpoint of students at the College of Sharia Sciences in Oman?
2. Do students' interactions with instructors and peers affect students' satisfaction with online learning from the viewpoint of students at the College of Sharia Sciences in online learning in Oman?

Remarkably, the data show that there is no direct effect between demographic factors and students' satisfaction with online learning. Students, irrespective of their demographic factors, were mostly satisfied with their experience in

Figure 1. Participating sample number.

online learning. On the other hand, the results of the study revealed that student-instructor interaction and student-peer interaction had the greatest impact on enhancing students' satisfaction with online learning. It plays a key role in increasing students' satisfaction with online learning and thus their recommendation to others to enroll in courses offered via online learning.

Conclusion

This study details the extent of students' satisfaction with asynchronous online learning. We present an analysis of the questionnaire distributed to students at the College of Sharia Sciences in the Sultanate of Oman to measure the degree of student satisfaction with online learning. Remarkably, the data show that there is no direct effect between demographic factors and student satisfaction with online learning. On the other hand, there is a strong and noticeable effect between students' satisfaction with online learning and students'-instructor interaction and students'-peer interaction. The students of the College of Sharia Sciences are on the whole very satisfied with asynchronous online learning. They consider it a very successful experience and recommend it to others.

Data availability

Figshare: A study of students' satisfaction in asynchronous online learning dataset. <https://doi.org/10.6084/m9.figshare.18152690> (Al-Omairi & Hew, 2022).

Data are available under the terms of the [Creative Commons Attribution 4.0 International license](#) (CC-BY 4.0).

Ethics and consent

Ethical Approval was granted by the Research Ethics Committee of Multimedia University (approval number EA2812021).

Participant consent

Consent was obtained from all participants written (signed) and verbally involved in the study.

Acknowledgements

Many thanks go to all the people in the College of Shari'a Science whose assistance was crucial in the completion of this research. It facilitated the process of data collection; it allowed the researcher to obtain data on the number of students who enrolled in online learning.

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Open Peer Review

Current Peer Review Status: ? ?

Version 1

Reviewer Report 30 May 2022

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Norah Mansour Almusharraf

Applied Linguistics Department, Prince Sultan University, Riyadh, Saudi Arabia

A decision of "Approved with revisions" has been rendered for the manuscript. The main reasons are listed as follows:

1. The manuscript should be synthesized in a cohesive manner.
2. The manuscript is lacking a central argument for the submitted work.
3. The research questions need to be linked to the aim, analysis, and findings.
4. The reference is not up to date and there are not cited from peer-reviewed journals.
5. The design of the method is not justified as well as the analysis.
6. The Discussion needs to discuss future implications and significance to future work.

Is the work clearly and accurately presented and does it cite the current literature?

Partly

Is the study design appropriate and is the work technically sound?

Partly

Are sufficient details of methods and analysis provided to allow replication by others?

Partly

If applicable, is the statistical analysis and its interpretation appropriate?

I cannot comment. A qualified statistician is required.

Are all the source data underlying the results available to ensure full reproducibility?

No source data required

Are the conclusions drawn adequately supported by the results?

Partly

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Dr. Norah Almusharraf is an Assistant Professor at the Linguistics and Translation Department at Prince Sultan University, Riyadh, KSA. She is currently leading three leading roles: the Research Director of the College of Humanities and Sciences, the leader of the Educational Research lab (ERL), and the Director of the writing and Tutoring center (WTC) at the same institution. Dr. Almusharraf received her Ph.D. degree in Foreign and Second language Education from the University at Buffalo. Her professional and research interests focus on English as a foreign language (EFL) learning pedagogics, inquiry-based teaching and learning, project-based learning and content-based instruction, cultural magnitudes of foreign/second language teaching and learning classroom, multimodal assessment and teaching strategies, technology implantation in the EFL English classrooms, teacher professional development using class critique and through professional learning community (PLC), qualitative research methods: dialogic classroom discourse & comparative case studies, and computing implementations in statistical research.

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.

Reviewer Report 04 March 2022

<https://doi.org/10.5256/f1000research.77240.r121388>

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M. Khalid M. Nasir

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The title of this article "Students' Satisfaction Of Online Learning In Oman" with the aim to determine the relationship between demographic variables, interactions with instructors and peers with regards to students' satisfaction was interesting. It could contribute to the literature in this field. However, the authors need to cite more current literature (e.g. 2018-2022). The Pearson correlation analysis is recommended instead of percentages, and the *r* and R square result should be the main focus of the discussion as well as the effect size.

Is the work clearly and accurately presented and does it cite the current literature?

Partly

Is the study design appropriate and is the work technically sound?

Yes

Are sufficient details of methods and analysis provided to allow replication by others?

Yes

If applicable, is the statistical analysis and its interpretation appropriate?

Partly

Are all the source data underlying the results available to ensure full reproducibility?

Yes

Are the conclusions drawn adequately supported by the results?

Yes

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Area of specialization in Computer Education, Educational Technology, Instructional Technology & Community of Inquiry (CoI) in Online learning. A Certified Professional Technologist as acknowledged by Malaysian Board of Technologists (MBOT) in the field of Information & Computing Technology (IT), and A Master Trainer by Malaysia Digital Economy Corporation (MDEC) in 2019.

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.

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