



ISSN: 0976-3376

Available Online at <http://www.journalajst.com>

ASIAN JOURNAL OF  
SCIENCE AND TECHNOLOGY

Asian Journal of Science and Technology  
Vol. 08, Issue, 12, pp.7210-7216, December, 2017

## RESEARCH ARTICLE

### DENTAL STUDENTS' ATTITUDE TOWARDS THE USE OF DIGITAL TEXTBOOKS; A SURVEY DONE AMONG THE STUDENTS OF A DENTAL SCHOOL IN RIYADH, KSA

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#### ARTICLE INFO

##### Article History:

Received 29<sup>th</sup> September, 2017  
Received in revised form  
24<sup>th</sup> October, 2017  
Accepted 06<sup>th</sup> November, 2017  
Published online 30<sup>th</sup> December, 2017

##### Key words:

Dental students,  
Digital resources,  
Dental curriculum.

#### ABSTRACT

**Introduction:** With lap-tops a required tool in many student armamentaria, electronic books in various formats often replace some or most textbooks required by instructors. For numerous reasons, including environmental preservation, cost savings, convenience, and flexibility, schools are selecting digital textbooks over printed books

**Materials and methods:** The survey designed with eighteen items that included closed-ended questions (yes/no or select one or all that apply options). The items were formatted and divided into four categories: 1/ students' computer use (experience and comfort); 2) students' study habits; 3) use of e-textbooks versus traditional print textbooks; and 4) general demographic information.

**Results:** Females exhibited higher mean scores than males regarding the usage of electronic resources. The comparison was statistically significant.

**Conclusion:** Digital resources have become very popular among the dental students and it has affected their grades in a positive way.

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#### INTRODUCTION

Electronic publications are rapidly replacing printed materials in personal, professional, and educational collections. Libraries have substituted many, if not most, titles in their journal collections with electronic subscriptions, and many books are now available in digital format. With lap-tops a required tool in many student armamentaria, electronic books in various formats often replace some or most textbooks required by instructors. For numerous reasons, including environmental preservation, cost savings, convenience, and flexibility, schools are selecting digital textbooks over printed books (Strother *et al*, 2009). Some feel that the use of computers and e- textbooks in the classroom opens up new potential for both teachers and school students. This technology has now penetrated the class- room to an extent previously almost unimaginable. The production of electronic access technology for the written word, such as net books, Kindles, iPads, and tablets, has accelerated the use of computers in the classroom with ancillary e-textbook technology. While use of technology in the classroom is gaining momentum, more needs to be done to re- move barriers to learning with technological tools. This is especially true in dental schools where inclusion of technology can assist dental students and faculty members

with the necessary tools designed to stimulate further learning (Ditmyer *et al*, 2011). Despite the advantages that e-textbooks pose, such as interactive features and accessibility on mobile devices, several barriers exist regarding implementation in higher education, namely non-standardization of the platform, limited use by students, and the unclear role of the instructor in adoption. Still relatively new, digital reading has grown slowly in United States higher education. Because of this, books developed and delivered digitally are still evolving and can vary widely. A universal standard called electronic publication (ePUB) exists; however, companies such as Apple and Amazon have created proprietary formats. Some e-textbooks exist only in Portable Document Format (PDF, which is essentially an exact reproduction of print), while others offer interactive features such as quizzes, polls, and note sharing. Some e-textbooks are freely available on the web, while others must be purchased through traditional publishers. Students increasingly bring their own devices to the learning environment, and most students own at least two different devices (DeNoyelles *et al*, 2015). There is a considerable difference in the attitudes of dental students when attending their lectures when it comes to the use of digital textbooks. Students using digital textbooks spend less time in preparing for their lectures and classroom assessment as compared with the students using traditional books (Shepperd *et al*, 2008). It has long been assumed that the use of computers in the class rooms for various classes can be really helpful and supportive.

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On the other hand there are people who also think that the use of e-books and computers should be banned in the field of medicines since it has proved to be deviating for them in several ways. This included playing games, sending emails and also exchanging messages. Similarly there have been several objections from students as well when it came to e-books and computers as a source of studying. One of the major reasons was the fact that the students felt disconnected from what they were reading and more over it was also inconvenient for the eyes to be stuck in one place for so long (Salajan, Schönwetter & Cleghorn, 2010). There are few examinations that contrast impression of e-course readings with conventional printed version reading material. Scientists have announced irrelevant contrasts in the impact on course reviews. Just a couple of college undergrads have revealed perusing the material when it is exhibited in electronic as opposed to print format and, all in all, evaluated the utilization of e-course readings less positively. While assessing therapeutic inhabitants' and undergrads' reactions, a few specialists found that lesser specialists favored conventional assets to electronic choices (Gupta, White & Walmsley, 2004). This innovation has now infiltrated the classroom to a degree already relatively inconceivable.

The generation of electronic access innovation for the composed word, for example, net books, Encourages, iPads, and tablets, has quickened the utilization of PCs in the classroom with subordinate e-course reading innovation. Since data innovation has influenced numerous parts of human conduct, there is no motivation to speculate its impact on instructive practices would be any extraordinary. This move to expanded utilization of electronic ideal models is related with the development of another age of students. Ages Y/Z, characterized as those conceived from 1982 to 2002, have received e-innovation effortlessly. This age is described by expanded utilization of, comfort in, and recognition with media correspondences and computerized advancements. The individuals who have had a go at forbidding workstations from classroom settings have met with complaints from this age of undergrads, who battle that their capacity to multitask empowers them to effectively and effectively take an interest with PCs in the classroom. The difference between the e-innovation abilities of this age of undergrads and current teachers has been found to make separation and estrangement among undergrads. Therefore, the open deliberations proceed with: 1) do the undergrads of today shape an unmistakable age in regards to dynamic learning, and 2) do learning systems should be on a very basic level changed to conquer any hindrance amongst undergrads and instructors (Maria, Gianpiero & Giuseppina, 2010).

While utilization of innovation in the classroom is picking up force, all the more should be done to expel obstructions to learning with mechanical apparatuses. This is particularly valid in dental schools where consideration of innovation can help dental undergrads and employees with the vital instruments intended to fortify further learning (e.g., separate learning, reenactments, and PC based evaluation). Such methodologies can give adjust to the more customary ways to deal with conveyance of learning materials. Analysts have discovered that while, when all is said in done, dental undergrads endorse of e-learning as a way to supplement conventional learning, employees give off an impression of being more hesitant to acknowledge it (Andrew, Elizabeth &

Elise S., 2017). In spite of the fact that there is by all accounts general fulfillment with electronic assets, few examinations looking at utilization of e-course books in dental schools have showed up in the writing. Revelation and examination of proof based dentistry in dental schools might be upgraded with present and future innovations. Alongside the start of online learning in dental instruction, there is a desire that employees ought to incorporate rich mixed media with appealing instructive substance. Organizations, for example, Vital Source Innovations, Inc. (Raleigh, NC, USA) have particularly advertised e-reading material to dental schools. At present, a high level of dental schools utilize e-books, and numerous distributors have joined the e-course book generation temporary fad, with merchant information recommending that around 33% of all reading material in U.S. dental schools are currently totally digital.<sup>21</sup> The motivation behind this examination was to recognize how the utilization of electronic innovation is advancing in dental training. All the more particularly, this clear examination looked to distinguish and evaluate dental undergrads' states of mind about PC use as it identifies with their investigation propensities and utilization of e-course reading innovation (Nasim *et al*, 2015).

The utilization of PCs in dental and therapeutic instruction can be followed back to the 1970s where PC helped learning (CAL) was at first circulated on floppy circles and limited onto nearby PC systems. Be that as it may, CAL would now be able to be utilized for remove learning because of the more prominent adaptability gave by the web. This is on account of data can be put away on one nearby PC yet got to and shared by PCs around the globe. Initially, online innovation had impediments in regards to the transmission of substantial sight and sound records, yet this might be overwhelmed with the expanded accessibility of rapid web associations (Kimberly, 2014). Studies have demonstrated that undergrads consider utilizing PCs in the dental educational programs as a powerful apparatus, as CAL offers many points of interest over customary strategies for learning. For instance, CAL enables undergrads to work voluntarily and pace. It likewise permits the utilization of sound, recordings and movement to put data over. Many trust CAL can be utilized to help the dental educational modules to help defeat the issue of declining number of scholastic staff in UK dental schools. This is one of the fundamental factors that have driven the improvement of CAL in dental training (Amaury, 2004). In 1999, School of Dentistry at the College of Birmingham made the E-course site, a web based supplement to the dental undergrad educational programs. An examination by Walmsley *et al.*, discovered undergrads were happier with utilizing the Web than individuals from staff. Besides, undergrads were exceptionally excited about having address material accessible on the web yet individuals from staff were less energetic. An ensuing report into the utilization of the prosthetics claim to fame subject on the E-course thought that it was extremely fruitful with undergrads. Be that as it may, an absence of PCs for get to and deficient printing offices were the primary issues distinguished, which averted acknowledgment by undergrads of such learning data (Nico, 2016). Since 1999, the E-course has advanced significantly and contains data from most regions of claim to fame instructing on the dental undergrad program. Data on the E-course incorporates program points and goals and downloadable address gifts. Activity is being presented in different parts of the course where it depicts clinical methodology, for example, non-surgical endodontic

and agent procedures. The E-course additionally has a component of intuitiveness, with different decision questions and on-line visas, which give input to understudies. Understudies and instructors can likewise talk about issues with each other, by means of the notice and informing sheets (2-way correspondence). This last advancement is still in its earliest stages as understudies are hesitant to impart their perspectives and staff is worried that such an action will add to their workload. Inside the School of Dentistry, the E-course can be gotten to from the PC bunch, which comprises of 17 PCs, all with Ethernet 10/100 Mb association with the web, and one laser printer. Additionally access can be gotten from the understudy basic room (three PCs, no printer). The E-course site must be gotten to by utilizing the Web Voyager web program. Past work has demonstrated that the E-course has been effective inside the strength showing zone of removable prosthodontics. However including an entire establishment moves it far from the aficionado to the inclusion of all educating staff. Such a change may raise various issues which should be considered when presenting such a culture change inside a dental school (HA & Newton, 2012).

### Aims of the Study

- Determine the extent of digital textbook use among the dental students.
- Compare between male and female students

## MATERIALS AND METHODS

A comprehensive review of the literature regarding student study habits, technology as a learning tool, and the use of e-textbooks in higher education was conducted to determine valid items for inclusion in this survey research study. The survey designed with eighteen items that included closed-ended questions (yes/no or select one or all that apply options). The items were formatted and divided into four categories: 1/ students' computer use (experience and comfort); 2) students' study habits; 3) use of e-textbooks versus traditional print textbooks; and 4) general demographic information. Survey was organized using survey monkey and sent to the students using college emails. A total of 258 dental students responded to the emails. Collected data was subjected to statistical analysis using SPSS version 16. Analysis of variance was done to achieve the results.

## DISCUSSION

This study aimed to assess the prevalence of digital text book use among the dental students of Riyadh colleges of dentistry and pharmacy. It has been noticed that the current trend of students is to read from digital books as compared to the traditional books. Our major aim was to compare between males and females, however, we also made comparisons among the students with different GPAs (Marei, 2013). There were significant differences found between males and females. Females had a higher mean score when inquired about the hours spent on computer. Males exhibited higher mean scores regarding the comfort level of using computers before dental school. Female students showed higher mean scores regarding the hours spent studying and hours spent using text books. Males were higher in mean scores when inquired about printing electronic books to hard copies. On the other hand, females had higher mean scores when using their electronic

books to search for topics. These comparisons were statistically significant (Sundararajan, 2011). When compared the responses among the students with different GPAs, there were a number of statistically significant comparisons. Students with GPA less than 3 had higher mean scores when inquired about the comfort level of current computer use. Students with 4+ GPA had higher mean scores regarding hours spent studying, however students with GPA 3-4 had higher scores for hours using traditional text books (Aimee & Ryaan, 2013). There is a scope of improving this study by expanding the sample size and comparing between larger groups. Digital book options have a large number of supporters who trust that the utilization of PCs and e-course readings by instructors and understudies in the classroom will improve learning. Moving far from conventional reading material, nonetheless, has exhibited difficulties and protection among the two instructors and understudies. This examination found that, if given the decision, dental understudies would at present rather have conventional course books. While e-course readings are not new, they have had some trouble being acknowledged in advanced education. One upsetting finding in this investigation in respect to dental understudies' examination propensities was that while understudies were spending numerous hours every week contemplating, they were investing almost no energy utilizing or perusing from their reading material (Rick, 1988). In 1985, Schumacher and Waller noticed that peruses chance losing vital data when they can't cooperate with the content.

That is by all accounts the case in our investigation, with understudies demonstrating an inclination for utilization of conventional assets and a propensity to print e-course book materials for perusing and contemplating. This finding is like that of another examination in which 57.3 percent of the respondents demonstrated they lean toward printed copy to electronic course readings (Palak & Rashmi, 2016). While we feel that PC comfort is significant for understudies' readiness to utilize e-course books, that did not have all the earmarks of being the situation in this examination. A greater part of our reacting understudies detailed being permitted to utilize PCs in the classroom and to utilize their PCs to take notes and to think about. These outcomes were reliable with expected increments over the previous decade in millennial understudies in the dental school candidate pool and their positive introduction to the utilization of PCs. numerous in our accomplice said they invested a huge extent of energy consistently interfacing with innovation. Furthermore, understudies in the first and second a long time of dental school detailed utilizing the workstation more regularly than those in the third and fourth years. This error was likely affected by the move from a centralization of educational courses in the initial two years of dental school to clinical courses over the most recent two years in most dental schools. Notwithstanding, none of the respondents revealed taking notes the way it was done in the good 'old days (paper and pencil) regardless of whether they didn't report being awkward utilizing PCs or detailed practically no involvement with PCs when they entered dental school (Samaneh & Mehrak, 2012). Due to the move over the previous decade to Millennial understudies, it was normal that most understudies would be less inclined to go to addresses and more prone to appreciate electronic conveyance obviously materials. Be that as it may, there were no huge contrasts between understudies who favored perusing or concentrate from e-course readings and the individuals who favored conventional course books controlling for age.

Table 1. Mean scores with male and female comparison

Gender		Hours spent on Computer	Comfort in use of PC Before	Current Comfort Level	Hours Spend Studying	Hours Use Text Books	Take Notes	Electronic In College	Electronic Difficulty Use	Search Topics	Digital Books Class	Digital Search Topics	Digital Quizzes	Instructors Incorporation of references	Print Hard Copies	Purchase Hard Copies
Male	Mean	1.6728	1.8827	1.7222	1.5741	1.2037	1.2778	1.1111	1.7222	1.7963	2.3333	1.7037	1.7407	1.7963	2.0926	1.2593
	N	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162
	Std. Deviation	.59845	.51542	.52574	.76252	.59123	.44929	.31524	.52574	.67923	.66873	.53323	.58507	.52442	.72921	.43959
Female	Mean	2.0312	1.6875	1.8125	1.9687	1.4375	1.0000	1.0937	1.6250	1.6250	2.4063	1.8438	1.8125	1.8125	1.8750	1.2581
	N	96	96	96	96	96	96	96	96	96	96	96	96	96	96	93
	Std. Deviation	.63995	.58602	.63764	1.16486	.66193	.00000	.29301	.65293	.74339	.49371	.56806	.46595	.46595	.60263	.43994
Total	Mean	1.8062	1.8101	1.7558	1.7209	1.2907	1.1744	1.1047	1.6860	1.7326	2.3605	1.7558	1.7674	1.8023	2.0116	1.2588
	N	258	258	258	258	258	258	258	258	258	258	258	258	258	258	255
	Std. Deviation	.63708	.54983	.57040	.94993	.62751	.38021	.30670	.57702	.70723	.60951	.54955	.54397	.50259	.69171	.43885

Table 2. Mean scores with gpa comparisons

GPA		Hours spent on Computer	Comfort in use of PC Before	Current Comfort Level	Hours Spend Studying	Hours Use Text Books	Take Notes	Electronic In College	Electronic Difficulty Use	Search Topics	Digital Books Class	Digital Search Topics	Digital Quizzes	Instructors Incorporation of references	Print Hard Copies	Purchase Hard Copies
Less than 3	Mean	1.7692	1.8718	1.9231	1.4615	1.2308	1.2308	1.2308	1.9231	1.9231	2.0769	2.0000	1.7692	1.9231	2.1538	1.3077
	N	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39
	Std. Deviation	.58316	.40907	.48038	.75555	.58316	.42683	.42683	.73930	.62343	.62343	.56195	.58316	.62343	.77929	.46757
3 to 4	Mean	1.7619	1.8286	1.6000	1.6571	1.4286	1.2286	1.0857	1.5714	1.6286	2.2286	1.8286	1.9429	1.8286	2.0857	1.3714
	N	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105
	Std. Deviation	.59685	.56257	.49225	.95905	.69139	.42193	.28128	.55222	.59254	.54167	.44844	.53401	.44844	.55668	.48550
More than 4	Mean	1.8559	1.7658	1.8378	1.8919	1.1892	1.1081	1.0541	1.7027	1.7838	2.5946	1.5946	1.6216	1.7568	1.9189	1.1351
	N	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111
	Std. Deviation	.69866	.58706	.64018	.98490	.56429	.31193	.22715	.51513	.81358	.59358	.59358	.48718	.49020	.75239	.34342
Total	Mean	1.8039	1.8078	1.7529	1.7294	1.2941	1.1765	1.0941	1.6824	1.7412	2.3647	1.7529	1.7765	1.8118	2.0235	1.2588
	N	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255
	Std. Deviation	.64048	.55268	.57314	.95227	.63040	.38197	.29257	.57941	.70688	.61183	.55214	.54070	.49789	.68694	.43885

This could have been because of the lopsided number of understudies who were individuals from the millennial age (thirty years old or less) (George, 2016). Furthermore, a greater part of the reacting understudies detailed they would in any case go to address if not required regardless of whether there were discretionary electronic conveyance techniques. The greater part of these understudies detailed that they discovered class addresses accommodating and that they got new data not gave in their required reading material. Educators might not have been choosing course books that enlarge their addresses however rather were attempting to discover disparate data for understudies.

It could likewise be that educators were not basically assessing the reading material they were utilizing as they refreshed their courses. In either case, this could have been one reason a lion's share of the understudies revealed examining from their notes instead of from the allocated reading material (Patricia, Eva & Karon, 2014). The understudies in our examination revealed that while educators commonly allocated course reading readings, they likewise had a tendency to give understudies extra investigation materials. Most of the understudies revealed examining from eleven to over sixteen hours for each week and spending more than sixteen hours for each week in addresses, therefore setting aside a few minutes accessible for survey of course readings to some degree restricted.

Table 3. Anova for male and female comparisons

ANOVA		Sum of Squares	df	Mean Square	F	Sig.
Hours spent on computer before dental school	Between Groups	7.743	1	7.743	20.528	.000
	Within Groups	96.567	256	.377		
	Total	104.310	257			
Comfort level with computers before dental school	Between Groups	2.297	1	2.297	7.800	.006
	Within Groups	75.397	256	.295		
	Total	77.694	257			
Current comfort Level with computers	Between Groups	.491	1	.491	1.513	.220
	Within Groups	83.125	256	.325		
	Total	83.616	257			
Hours spent studying	Between Groups	9.390	1	9.390	10.802	.001
	Within Groups	222.517	256	.869		
	Total	231.907	257			
Hours use text books	Between Groups	3.295	1	3.295	8.616	.004
	Within Groups	97.903	256	.382		
	Total	101.198	257			
Take notes	Between Groups	4.651	1	4.651	36.637	.000
	Within Groups	32.500	256	.127		
	Total	37.151	257			
Use electronic books in college	Between Groups	.018	1	.018	.193	.661
	Within Groups	24.156	256	.094		
	Total	24.174	257			
Electronic books Difficulty in Use	Between Groups	.570	1	.570	1.716	.191
	Within Groups	85.000	256	.332		
	Total	85.570	257			
Electronic books to search topics	Between Groups	1.769	1	1.769	3.572	.060
	Within Groups	126.778	256	.495		
	Total	128.547	257			
DigitalBooks use during Class	Between Groups	.320	1	.320	.862	.354
	Within Groups	95.156	256	.372		
	Total	95.477	257			
Digital books to SearchTopics	Between Groups	1.182	1	1.182	3.960	.048
	Within Groups	76.434	256	.299		
	Total	77.616	257			
Digital books to prepare for Quizzes	Between Groups	.310	1	.310	1.049	.307
	Within Groups	75.736	256	.296		
	Total	76.047	257			
Instructors Incorporation of references in lectures	Between Groups	.016	1	.016	.062	.803
	Within Groups	64.903	256	.254		
	Total	64.919	257			
PrintHardCopies?	Between Groups	2.854	1	2.854	6.083	.014
	Within Groups	120.111	256	.469		
	Total	122.965	257			
PurchaseHardCopies?	Between Groups	.000	1	.000	.000	.983
	Within Groups	48.918	253	.193		
	Total	48.918	254			

Understudies may have discovered that perusing from course books was a bit much for them to be fruitful in their classes, since it's getting late weights related with dental educational programs prerequisites. The connection between time administration issues and utilization of innovation among dental understudies ought to be investigated in future examinations (Smith & Oosthuizen, 2006). A fourth of the respondents in our examination who utilized e-course books demonstrated they obtained a conventional reading material notwithstanding when an e-course reading was given. Different analysts have revealed that, disregarding the points of interest touted about the utilization of e-course books and electronic media in the classroom, understudies still want to buy conventional reading material (Alison, 2010). A fascinating investigation of how understudies utilize program based electronic books proposed that understudies thought that it was less demanding to work with the print form because of its recognition. Those writers discovered understudies favored utilizing e-course books in a more nonlinear manner and perusing sections instead of cover to cover. This inclination is noteworthy when one considers that numerous course books in specific controls are intended to be perused in a straighter manner.

Correspondingly, our investigation found that a decent part of the dental understudies still wanted to print data from the e-course books instead of read from the PC, with more than 50 percent detailing that they didn't read the reading material by any stretch of the imagination. In help of these discoveries, dental understudies taking an interest in a current report detailed utilizing e-course books for the most part to scan for particular words or ideas, however couple of understudies depended on their e-reading material to plan for classes or concentrate for tests/exams. Furnishing understudies with examine materials in electronic organization is less expensive and has wiped out the requirement for enormous printing. Along these lines, teachers have will probably furnish understudies with extra material through this medium than when they needed to pay for printing gifts (Riya, 2017). There were no generational contrasts in this specimen between the individuals who favored e-course readings and the individuals who favored conventional course books as for their perusing inclinations and examining inclinations. Be that as it may, this finding could be expected to there being far less respondents beyond thirty years old younger than thirty. The vast majority of these respondents were likely at or inside the Gen Y/Z gathering, which did not take into consideration illumination of generational contrasts (Michelle & Thomas, 2015).

Table 4. Anova with Gpa Comparisons

ANOVA		Sum of Squares	df	Mean Square	F	Sig.
Hours spent on computer before dental school	Between Groups	.532	2	.266	.646	.525
	Within Groups	103.664	252	.411		
	Total	104.196	254			
Comfort level with computers before dental school	Between Groups	.401	2	.201	.655	.520
	Within Groups	77.183	252	.306		
	Total	77.584	254			
Current comfort Level with computers	Between Groups	4.385	2	2.192	6.989	.001
	Within Groups	79.050	252	.314		
	Total	83.435	254			
Hours spent studying	Between Groups	6.277	2	3.139	3.530	.031
	Within Groups	224.052	252	.889		
	Total	230.329	254			
Hours use text books	Between Groups	3.277	2	1.638	4.227	.016
	Within Groups	97.664	252	.388		
	Total	100.941	254			
Take notes	Between Groups	.919	2	.459	3.203	.042
	Within Groups	36.140	252	.143		
	Total	37.059	254			
Use electronic books in college	Between Groups	.914	2	.457	5.529	.004
	Within Groups	20.827	252	.083		
	Total	21.741	254			
Electronic books Difficulty in Use	Between Groups	3.598	2	1.799	5.551	.004
	Within Groups	81.673	252	.324		
	Total	85.271	254			
Electronic books to search topics	Between Groups	2.823	2	1.412	2.867	.059
	Within Groups	124.094	252	.492		
	Total	126.918	254			
Digital Books use during Class	Between Groups	11.042	2	5.521	16.555	.000
	Within Groups	84.040	252	.333		
	Total	95.082	254			
Digital books to Search Topics	Between Groups	5.764	2	2.882	10.134	.000
	Within Groups	71.671	252	.284		
	Total	77.435	254			
Digital books to prepare for Quizzes	Between Groups	5.570	2	2.785	10.218	.000
	Within Groups	68.688	252	.273		
	Total	74.259	254			
Instructors Incorporation of references in lectures	Between Groups	.849	2	.424	1.722	.181
	Within Groups	62.116	252	.246		
	Total	62.965	254			
Print Hard Copies?	Between Groups	2.283	2	1.142	2.447	.089
	Within Groups	117.576	252	.467		
	Total	119.859	254			
Purchase Hard Copies?	Between Groups	3.123	2	1.561	8.592	.000
	Within Groups	45.795	252	.182		
	Total	48.918	254			

There were a few constraints to this investigation. Since a dominant part of the respondents went to schools that right now utilize e-course readings, they may have will probably react to an overview with respect to e-course books and have made the information be skewed by this condition. While overview look into has turned out to be a decent ease technique for gathering a lot of different information, estimations must be solid and legitimate to produce trust in generalizability past the specimen contemplated. Cross-sectional research examines have given a depiction of a particular point in time and given no sign of any arrangement of occasions. What's more, the utilization of intentional respondents expanded the odds that the example might not have been illustrative of the populace from which it was taken. It is conceivable that understudies who did not react were less inclined to utilize their PCs frequently. Indeed, even with the utilization of a substantial and dependable instrument, there could have been issues because of missing information, off base elucidation of inquiries, or deceptive reactions. Alert while summing up these examination results to other populace and setting is along these lines justified (Zhao & Kuang-yun, 2013).

In general, understudies discover the E-course valuable as a wellspring of data and feel that it is helping their learning background. By the by, essentially inquiring as to whether they feel the E-course has helped learning isn't a target measure of Ecourse's capacity to enhance understudy learning. There are few understudies in the third year who are not open to utilizing PCs and the E-course. In the surveys, one specific understudy had expressed that they discover the web 'troublesome and tedious to utilize' and asked for a 'manager exhibit constantly to help the individuals who battle'. This features one of the principle obstructions to utilizing CAL in training, i.e. understudies who can't utilize PCs will be truly distraught (Arezoo, Melika & Zahra, 2016). The greater part of understudies favor MCQs, data on clinical methods and supplemental data, i.e. understudies need material that can't be acquired from different sources, for example, address notes and course books. The remarks communicated by understudies additionally feature the appraisal driven culture of dental schools where material that will help in the examination are especially looked for after. The utilization of clinical pictures and movement on the E-course is a famous piece of the material. An examination by Plasschaert *et al.* concurred that

CAL for understudies ought to incorporate content, sound and pictures. Strangely, an investigation by Swamp *et al.* discovered that when data is conveyed utilizing activity are a bit much and may really diminish the viability of the instructing material. Despite the fact that understudies like liveliness, not all individuals from staff will have room schedule-wise to figure out how to and create these movements. By and large, understudies communicated the significance of contact with individuals from staff and along these lines need the E-course to supplement as opposed to supplant addresses (Emilie, 2013).

## Conclusions

- Females tend to use more electronic books and spent more time studying from them.
- Students having higher GPA used more electronic books and spent more time studying.

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