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The Use of ICT and Academic Performance among Undergraduates of the Faculty of Islamic Studies and Arabic Language at South Eastern University of Sri Lanka: A Gender-Based View

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Abstract

This paper presents a study academic performance on gender-based using ICT as supportive techniques among the Undergraduate students of the faculty of Islamic Studies and Arabic Languages. Mainly this research area focused on first-year students a total of 430. Among them, a sample of 120 students from the batch of first-year undergraduate's students used for research purpose in this study. Among this sample of students, 60 were boys and 60 were girls, and questionnaires were circulated among them to analyze the gender-based performances through the literacy of computer knowledge on the undergraduate students of Faculty of Islamic Studies and Arabic Languages (FIA). For this research, a questionnaire was used as the survey instrument to distinguish the details. Their characteristics are related to their background and experiences in working with ICT tools as well as research area-related questions such as fundamentals of ICT knowledge also covered in that questionnaire. Computer usage level and the literacy determines the success and the failures of Undergraduates. Finally, the results discovered that even though male students were showed interest over female students, they scored lesser compared to females.

Keywords: Sample, Faculty of Islamic Studies and Arabic Languages (FIA), Undergraduates, Questionnaire, ICT (Information Communication Technology),

Introduction

ICT stands for Information Communication Technology which means creating, storing, managing, communicating, and obtaining information. Today in our modern world, computers are everywhere. ICT reading materials are important at the same time and very important and the need to use available technology to support teaching and learning activities is very important for both teachers andstudents. Undergraduates who join in private or government sectors need to be computer proficient at some point, they are expected to involve in the activities. such as drafting an email to communicate, analyzing data using SPSS, make presentations using PowerPoint.

Modern information and communication technologies (ICT) has substantially changed the type of skills that are needed to successfully Collaborate, participate, communicate, and survive in modern society. Therefore, in many countries, national strategies have been developed to foster digital competencies in school and the workplace. In the development and the digital era, the current rapid developments in the field of ICT have changed significantly These rapid changes have brought about new opportunities like digital libraries, hybrid libraries, e-library, online cataloguing etc. to improve the management and services of their resources.

Learning ICT, in general, can be defined and must use digital technology at the right level, to reach the level of networks, word processing, spreadsheet, PowerPoint communication using the Internet is a few tasks. Once they have developed enough knowledge then they can face the challenges and compete in the modern world effectively and efficiently.

Hoffman [1] suggested in his studies that the successful implementation of ICT depends on five factors, first infrastructure, second attitude, third-person development, one last support, ultimately sustainability, and transfer.
Acceptable Information and Communication Technologies (ICTs) and the public begins to settle for new information-based technologies [2].

Therefore, this paper aims to look at the possible correlations between the level of ICT learning among undergraduate students and gender mainstreaming at the Faculty of Islamic Studies and Arabic Languages at the South Eastern Universityof Sri Lanka.

Literature Review

There was a bundle of studies were conducted in the past years concerning the use of ICT and academic performance based on gender. According to the statement of Tondeu [10], the computers become closer to the society so many people have access to handle it, the gender gap if it existed at all, now would be narrowing. According to the work of Katz [8], pointed in his work that Information and Communication Technology focuses on students and how they can survive in these digital environments. In another study by Zurkowski [7], out of the classroom, ICT literacy is essential for being productive citizens in a knowledge-driven society.

The issue that needs to be examined regarding the ICT literacy and gender-based performances of the students. Regarding this gender-based performances, Kulik [3] in his study proved that students who gained ICT literacy earned marks a lot. Silvin-Kachala's analysis pointed out that students who have the highestICT literacy experienced positive effects on achievement in all major subjects [4].Another study conducted by the authors Siritongthaworn et al., [5] examined theimplementation of e-learning technology in Thailand universities. He suggested in his studies that replacing the traditional method studies with ICT's effectively can positively motivate them.

Many pieces of research have been conducted on gender differences to analyze the performance of both genders. These research studies have also shown that female students are performing better than male students.
Moreover, Shashaani [6] examined between the two groups males and females about their interest Internet usage.in his study proved that a remarkable difference in the level of their interest.

Further another study of ICT, "literacy is often taken for granted, to the detriment of students who lack skills that fall into the scope of ICT literacy" [9]. Therefore, this research was conducted to examine the academic performances on gender-based using ICT on university students of the Faculty of Islamic Studiesand Arabic Languages.

Material and Method

In this research, based on a survey research design in the first part related to the familiarity of the students with ICTs and the rest of the part was the connection with our objective that the use of ICT and the academic performance gender-based, used a sample of 120 students from the batch of first-year students a total of 430 students participated in this study. Among this sample of students, 60 were boysand 60 were girls, and questionnaires were circulated among them to analyze thegender-based performances through the literacy of computer knowledge on the undergraduate students of FIA. A set of questions was asked to collect their characteristics and the other part related to test their level of literacy.

Data points for achievement and attitude were averaged and reported in summary form, with gender differences indicated in terms of Chi-Square statistics where appropriate. SPSS Crosstabs (Chi-Square) nonparametric testing was used to examine the associations between use of ICT and academic performance based on gender.

Also, Lecturers in charge were involved in this research via interviews to investigate and examine the possible affiliation between computer literacy and gender equality and the students' performance. To examine, the gender-based performances the following research questions were asked by an interview where enquired from their instructors:

1. Are there any differential impacts of ICT on academic performances in education specially in gender based?
2. What are the student's attitudes toward ICT?
3. Is the use of ICT affects their academic performances?
4. Does gender impact the performances?
5. Do students use ICT to support their academic performances?

Findings and Discussion

According to the findings of the research students of the Faculty of Islamic Studies and Arabic Languages at the South Eastern University of Sri Lanka utilized the computer laboratory and its available resources to support their studies. On the other hand, the lab itself facilitated appropriately to enhance students' gender-based performance by the way of Google Classroom, Moodle, and Learning Management System (an e-learning tool) the names but a few.

Personal characteristics were based on respondents answered the following questions in this order. According to the findings of the research, the study has shown that 98.5% of respondents use the computer and only 1.5% do not. As further, answered this question that "Have you ever visited your University Computer lab?" 99.5% of them visited their faculty Computer lab to enhance their literacy level ICT and only 0.5% have not.

Table 1. Descriptive statistics on familiarity of the students with ICTs

	Overall (n=120)		Male (n=60)		Female (n=60)		*F*	*d*	*p*
	M	**SD**	**M**	**SD**	**M**	**SD**			
Study-related computer use	6.03	6.59	5.97	7.88	6.06	6.00	0.04	-0.01	.842
Computer use for leisure activities	11.73	12.86	17.27	17.60	9.51	9.50	89.01	0.55	.000
Study-related computer attitudes	3.61	0.64	3.66	0.65	3.58	0.57	3.31	0.13	.069
General computer attitudes	2.60	0.90	3.00	0.97	2.44	0.82	95.21	0.62	.000

Theoretical ranges for the independent variables were study-related CU (0.00-108.00) CU leisure activities (0.00-140.00), study-related CA (1.00-5.00), general CA (1.00-5.00).

Further respondents mainly used Computers 2-3 hours a day 24.5% of them, more than 3 hours a day 36.5% of them, 1 to 2 hours a day 16.0%, 0 to 1 hour a day 17.5%, 5.5 % of the respondents use the computer only when needed (a couple of times a month) and 0.5% of the respondents do not use a computer. Also, for finding different types of documents and information (65.5%), entertainment and amusement (11%), Internet for communication and email browsing (9.5%), and learning (13%). The remaining 0.01% of respondents do not use the Internet. They answered the question "What do you usually use a computer for? " and that most of them, 80.5% use computer for Internet surfing, 11.5% for writing and making different types of documents, 7.5% for playing games, and 0.5% of respondents said they do not use it at all (the respondents were able to mark more than one answer in this question).

On an estimated scale on the largest percentage of respondents evaluated their knowledge of computers and computer technology with 3 (good) (42% of them).

Table 2. Percentages were allocated based on their written answers for the test

Questions	Correct Answer	
	Male	Female
Based on Hardware	69%	74%
Based on Software	59%	73.5%
Based on Network	77.5%	79%
Based on Operating system	84%	87.5%
Based on Windows File Management	88%	89%

The second part of the questionnaire consisted of a test that was used to examine the relationship between ICT and gender-based performance among the undergraduate students of the Facultyof Islamic Studies and Arabic Languages. The test included 15 questions, relatedto different aspects of the computer such as Hardware, Software, Network, Operating system, Windows File Management.

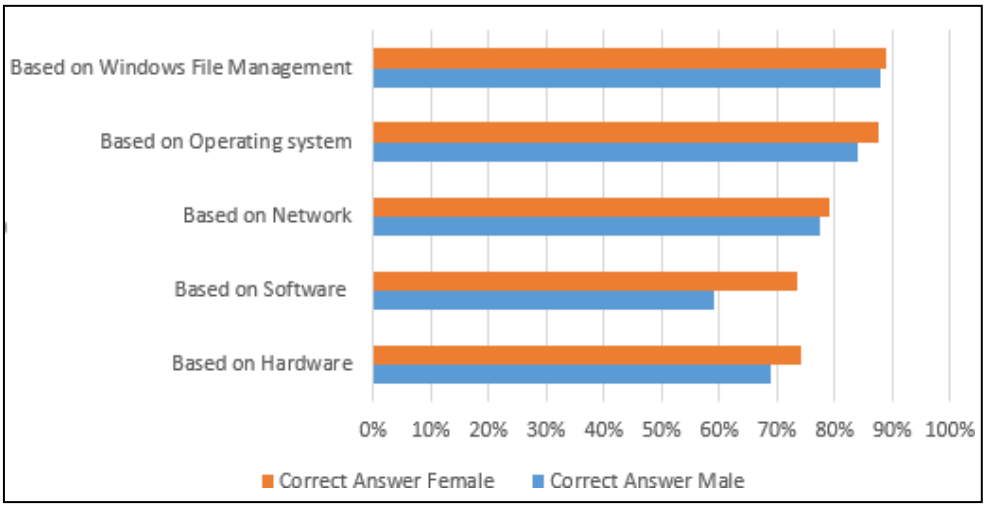

Figure 1

As per the Table 2, both male students and female students had answered correctly to the questions and gained more than 50% of them. These results speak volumes that the students of the Faculty of Islamic Studies and Arabic Languages are have got a satisfactory level of ICT knowledge. They responded to the question regarding the Hardware male students answered69% correctly and female students gained 74% of them. Finding for the responseto Software-based questions 59% pursued by male students and 73.5% by female students.

In the same way, the level of literacy of this Faculty of Islamic Studies

and Arabic Languages on Network related questions was traced, for these male students gained 77.5% at the same time 79% by female students. Operating system-related questions were also asked to pursue their literacy level. For that case, 84% answered correctly to those questions, and female students gained 87.5% of them. Furthermore, Windows File management associated questions were included in this questionnaire. in that part 88% were by male students and 89% of them by female students. As pointed above female students scored a higher percentage than male students' percentages. When comparing the Table 2, it is clear that use of ICT on the undergraduate students of the Faculty of Islamic Studies and Arabic Languages both male and female are capable enough to manage, use the ICT components and its materials acceptably. Also,their academic performance using ICT is at an acceptable level.

On the other hand, the performances according to the results of this Table 2 depict the value that male and female students correctly answered most of the time higher than 50% of them. Even though by comparing gender-based academic performances, the female student's academic performance is higher than the male student's academic performance in a certain range. Male students are shown their interest, but their performances are less than female students.

Through the data collected from their lecturer in charge by an oral interview revealed the fact that male students exposed their academic performance in an acceptable range especially on their practical-based lecture hours. Even though males exposed their interest in practical sessions and, but their academic performance is lesser than the female student's academic performances. Analysis of data revealed significant differences in the self-report responses of gender-based academic performances using ICT.

Conclusion

Given that in educational settings such as universities, computer applications and digital learning environments are increasingly present and that the use of digital technology is required to obtain a degree, it is important to make sure no one is excluded because of less favorable computer attitudes resulting in avoiding computer use. The use of ICT and the academic performances based on the gender ICT will impact everyone's life in the future. The Faculty of Islamic Studies and Arabic Languages student's academic performances are not an exception case to this trend.

Interestingly, an examination of individual items measuring the attitudes of male students, this study found that undergraduate students of the South Eastern University of Sri Lanka especially the Faculty of Islamic Studies and Arabic Languages both male and female are capable enough to manage and use the ICT components and its materials in an acceptable manner to enhance the academic performances based on gender. Also, their level of academic performances is varied according to the gender-based.

Even though the undergraduate students of the South Eastern University of Sri Lanka especially the Faculty of Islamic Studies and Arabic Languages comparatively depicts the statement that the female student's use of ICT and the academic performances are higher than the male student's academic performances in a certain range. Male students are shown their interest, but their academic performances are lesser than female students.

Moreover, in this electronic era, the usages of ICT and use ICT specially in the academic sectors like school, university are very important for the students after finishing their academics. Therefore, we strongly feel that the Use of ICT can help students' personal and social working environments. Those who are not gained sufficient knowledge in ICT will suffer in the future. They cannot compete successfully in future activities.

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