



INTERNATIONAL JOURNAL OF RESEARCH SCIENCE & MANAGEMENT

AWARENESS REGARDING HOW MODERN TECHNOLOGY IS IMPACTED IN EDUCATION

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DOI: 10.5281/zenodo.6854238

Keywords: Awareness, Technology, dental students.

Abstract

Background: The era of 21st century is often regarded as an era of technology. Technology today plays a very important role in our life. The impact of technology can be felt in every possible field one such field is Education. It is revealed that use of modern equipment technology and tools, the learning and interactivity of students increases.

Aim: This study attempts to determine about dental student's awareness on impact of modern technology on education.

Materials and methods: A cross sectional study was conducted among the dental students (II-year, III-year, IV year, interns) in a tertiary care teaching hospital Khammam, using a web-based tool called Google forms, a semi-structured online questionnaire was designed and distributed via link to the students in order to fill. Descriptive statistics were given. A p-value <0.05 was used to evaluate statistical significance.

Observations & results: A total of 310 dental students participated in the survey. Age of participants ranges from 18-25 years. Majority of them were aware of impact of modern technology on education. About (58.1 %) of them are somewhat familiar with involvement of technology in education and most of them (49.7%) think technology made their work more efficient.

Conclusion: Based on current study results, students were aware of impact of modern technology on education.

Introduction

Technology is a gift of God. After the gift of life it is perhaps the greatest of god's gifts. Technology has certainly the way we live. Undoubtedly technology plays an important role in every sphere of life. It has impacted different facts of life and redefined living. Technology has revolutionized the field of education. The importance of technology in education cannot be ignored. In fact, with the onset of computers in education it has revolutionized the field of education, it has become easier for teachers to impart knowledge and for process of teaching and learning enjoyable.

Aim

To assess awareness regarding how modern technology is impacted on education.

Objectives

- 1.To determine awareness regarding impact of modern technology on education among dental students based on gender.
- 2.To determine awareness regarding impact of modern technology on education among dental students based on year of study.

Methodology

Study design and area

A cross sectional study is carried out at Tertiary care teaching hospital, Khammam.

Study population

Undergraduate dental health care students.

**Study instruments**

A pre tested online questionnaire which consists of 16 closed ended questions. Each participant has to fill their demographic data like name, gender and year of study. Participants has to select one option from the answers provided against each question.

Pilot study

A pilot study was conducted on group of students to assess the validity and reliability of study.

Sample size determination**Sampling methodology**

The sampling used in convenience sampling.

Inclusion criteria

Students who were interested and were willing to participate are included.

Exclusion criteria

Students who were not willing to fill questionnaire were excluded.

Ethical clearance

The ethical clearance was obtained from ethical committee of Mamata Educational Society, Khammam, Telangana to conduct a study.

Data collection

An online questionnaire was prepared in google forms and sent by copying a link via social networking site (What's app)

Informed consent

An informed consent was already taken prior to study.

Organizing the study

The purpose of study was explained to students and an online questionnaire was forwarded to them. Participants were asked to select an option from the answers provided against each question.

Statistical analysis

Data from the filled questionnaires was conducted in a tabular form in excel worksheet and evaluated for analysis.

Out of 310 subjects,129(41.6%) of them belonged to 18-21 years of age,181(58.4%) of them belong to 22-25 years of age. There were 64(20.6%) male students and 246(79.4%) of them were female students. 77(24.8%) belonged to II BDS, 61(19.7%) belonged to III BDS, 54 (17.4%) belonged to IV BDS,118 (38.1%) were INTRENS. The demographic data is depicted in Table 1.

Results

Demographic data (Table 1)

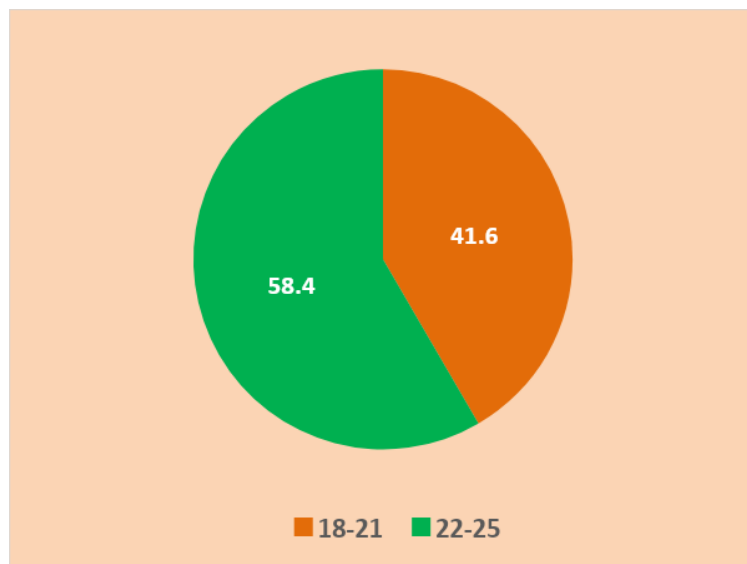
Table 1: Demographic Profile Of Respondents

Demographic profile	No of respondents	% Of respondents
AGE GROUPS		
18-21	129	41.6



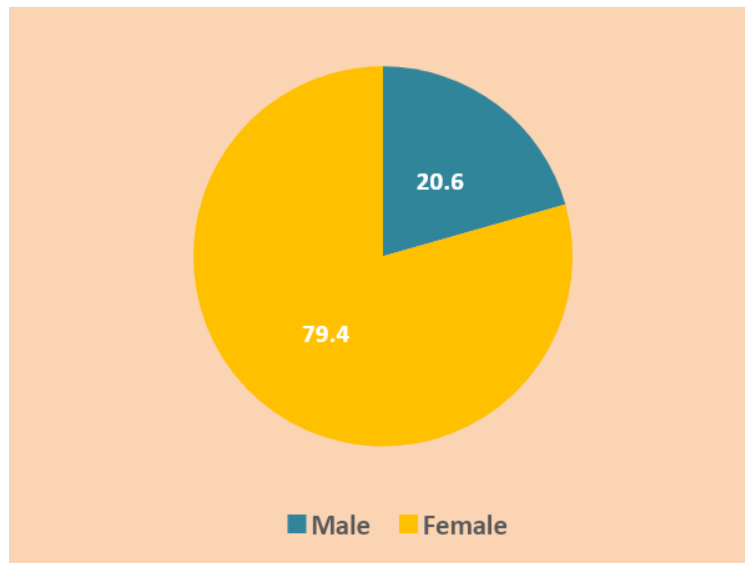
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22-25	181	58.4
Mean age	5.5000	
SD age	2.06965	
GENDER		
MALE	64	20.6
FEMALE	246	79.4
YEAR OF STUDY		
2 nd year	77	24.8
3 rd year	61	19.7
4 th year	54	17.4
Interns	118	38.1
Total	310	100

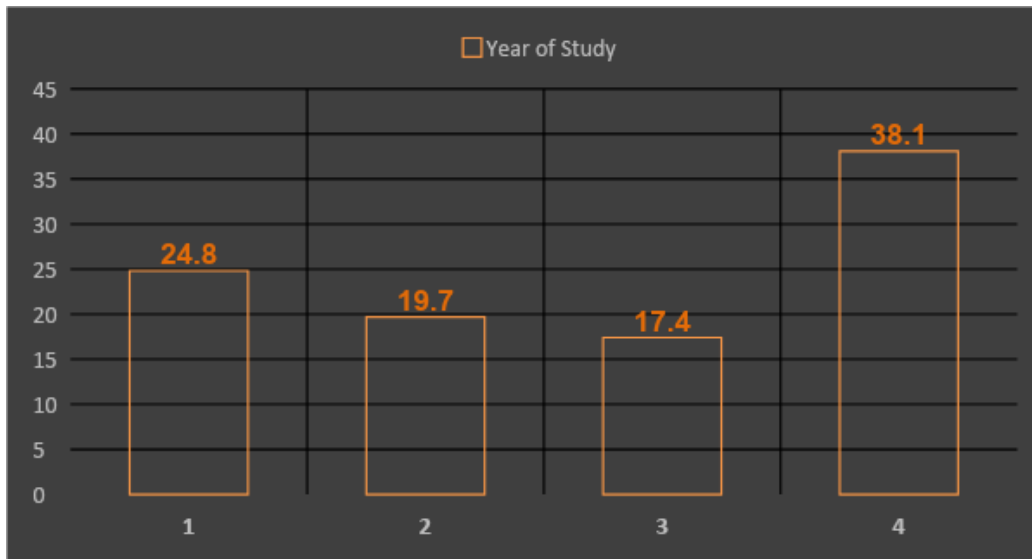


Graph- 1a: Demographic details – age

Out of 310 participants, majority of them belonged to 22-25 years age group, with a mean age of 5.9278 +2.27699 years. Most of the participants (79.4%) are females, in the present study most of participants were interns (38.1) followed by second years (24.8) third years (19.7) and fourth years (17.4).



Graph-1b: Demographic details – gender



Graph 1C: Demographic details- Year of Study

Table-2: Distribution of study subjects based on responses to items

Items	Responses (Options)							
	A		B		C		D	
	N	%	N	%	N	%	N	%
Q1	90	29.0	180	58.1	25	8.1	15	4.8
Q2	66	21.3	43	13.9	13	4.2	188	60.6
Q3	82	26.5	154	49.7	48	15.5	26	8.4
Q4	109	35.2	114	36.8	58	18.7	29	9.3
Q5	108	34.8	130	41.9	60	19.4	12	3.8



Q6	63	20.3	173	55.8	55	17.7	19	6.1
Q7	49	15.8	195	62.9	50	16.1	16	5.2
Q8	70	22.6	42	13.5	19	6.1	179	57.7
Q9	238	76.8	72	23.2	-	-	-	-
Q10	71	22.9	128	41.3	91	29.4	20	6.5
Q11	42	13.5	46	14.8	19	6.1	203	65.5
Q12	217	70.0	93	30.0	-	-	-	-
Q13	33	10.6	40	12.9	32	10.3	205	66.1
Q14	32	10.3	35	11.3	28	9.0	215	69.4
Q15	33	10.6	31	10.0	23	7.4	223	71.9
Q16	83	26.8	151	48.7	61	19.7	15	4.8

Table-3: Mean comparison of awareness on the impact of modern technology based on variables

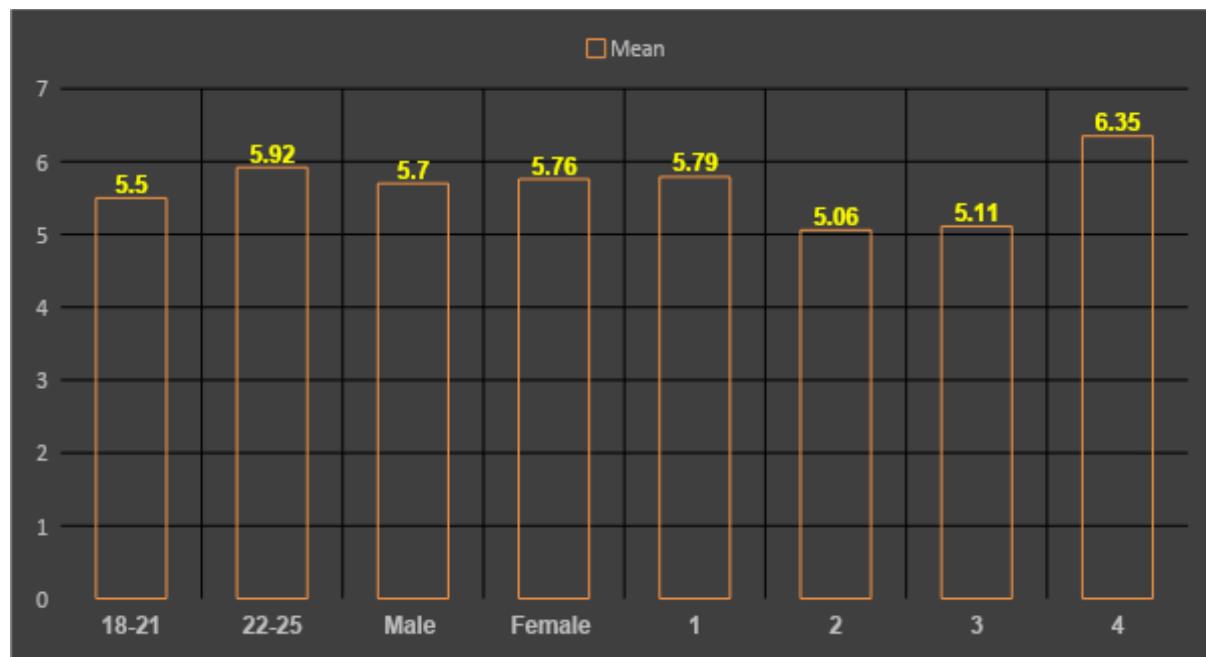
Variables		Mean	SD	P value
Age	18-21	5.5000	2.06965	0.093
	22-25	5.9278	2.27699	
Gender	Male	5.7031	2.39497	0.848
	Female	5.7623	2.15090	
Year of study	1	5.7922	1.72701	0.000*
	2	5.0678	2.50423	
	3	5.1111	2.01566	
	4	6.3559	2.23998	

Age & gender -Mann-Whitney U test

Year of study – Kruskal Wallis test

P,0.05 considered statistically significant.

NOTE: The responses for all the questions except Q2. Q6, Q8 and Q16 were considered to assess the overall awareness on the impact of modern technology. The responses that represent positive were scored as 1 and the negatives are scored as 0. Thus, higher the mean scores, higher the awareness.



Graph-3: Mean comparison of knowledge based on variables

Discussion

(58.1%) of them are somewhat familiar with involvement of technology in education, (60.6%) are familiar with all kind of online teaching tools, (49.7%) of students think that to a moderate extent technology made their work more efficient.

On an average (55.8%) used technology to complete their task (62.9%) agree that technology intimidates students. About (76.8%) students heard of online degree and (41.3%) feel it beneficial to a limited extent. Majority (70%) of students know ICT. Majority (71.9%) of them think modern technology has a positive impact on education such as enhanced learning, globalization and having no geographical limitation. (48.7%) students has good proficiency in modern technology

Conclusion

On comparison of awareness between females and males, females have more awareness regarding impact of modern technology compared to males.

Among these, INTERNS shows to have maximum awareness followed by second, third and fourth years. Table 3.

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