Indonesian Journal of Education Methods Development
Vol. 7 (2019): August
DOI: 10.21070/ijemd.v5i1.51 . Article type: (Elementary Education Method)

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ISSN 2598-991X (online), https://ijemd.umsida.ac.id/, published by Universitas Muhammadiyah Sidoarjo

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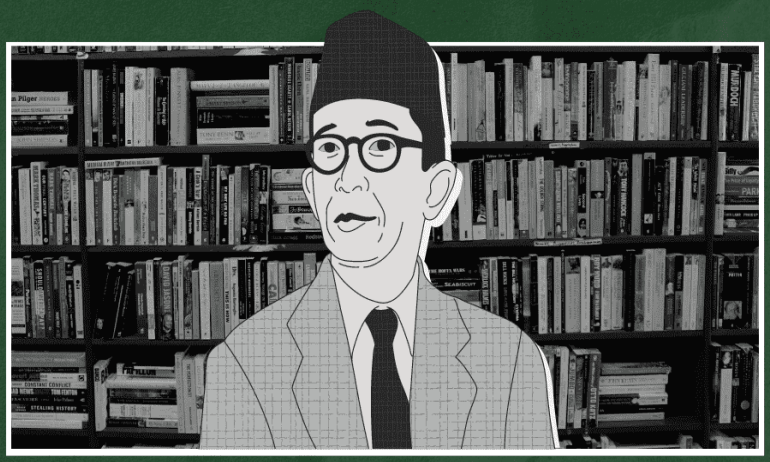
ISSN 2598-991X (ONLINE)

IJEMD



INDONESIAN JOURNAL OF EDUCATION METHODS DEVELOPMENT

UNIVERSITAS MUHAMMADIYAH SIDOARJO

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Article information

Check this article update (crossmark)

Check this article impact (*)

Save this article to Mendeley

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ISSN 2598-991X (online), https://ijemd.umsida.ac.id/, published by Universitas Muhammadiyah Sidoarjo

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Effects Of Internet-Based Social NetworkAmong University Students' Academic Performance: A Case Study In School Of Quantitative Sciences

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Abstract

This paper is to investigate the effect of google usage on uumsqs final yearstudents' academic performance. The scope of this paper is focusing on studying the effects of google usage on university utaramalaysia (uum) students' academic performance. This study has been carried out among final year students of school of quantitative science (sqs) by did survey through asking respondents for information using written questioning which is questionnaire. The survey from the respondents takes time almost a week. It is believe that google usage will create a positive impact on students. By doing this study, students can know whether google is affecting their academic performance. The sources where students refer for academic purpose can also been seen. Besides, the role of google that can help students to gain extra knowledge in the learning process can be identify. Students can find out more advantages that is brought by google which can leave a positive effect on their academic performance.

Published date: 2019-08-19 00:00:00

ISSN 2598-991X (online), https://ijemd.umsida.ac.id/, published by Universitas Muhammadiyah Sidoarjo

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Introduction

People, companies, and institutions feel the depth of the major technological change, there is a drmatic increase in sociability, facilitated by permanent connectivity and social networking on the web. (Castells,n.d).Youngsters need friends and play with friends to learn how to behave and interact with others. Human beings are not born with any social abilities – we have to learn. (Temmel, Theuermann, Ukowitz, & Vogrin,n.d)

Overall, publics in emerging and developing nations are more convinced that the internet is having a negative effect on morality. And in no country surveyed does a majority say that the internet's influence on morality is a positive. (Pew Research Center, 2015)

For many people, distance learning - learning from home or workplace, at their own pace is the only way they can participate in higher education, expand their knowledge or skill base, and increase their employability. The Internet is an ideal medium for 'webeducation'; learners can access teaching materials, submit coursework and take part in interactive training sessions. (The impact of the Internet,n.d)

Internet gives an easy access to information. Online reference books and dictionaries are much cheaper way to search for information renewed and up to date. Moreover, most newspaper sites have an archive in which you can search for old articles to help in completing assignments. (Temmel, Theuermann, Ukowitz, & Vogrin,n.d)

Youngsters can easily get online and find anything they need for troublesome homework answers. Students can find essays or test answers for any subject imaginable. Knowing that the correct answers are readily available online can prove far too tempting for some students, which leads to academic fraud, plagiarism, and rampant cheating. (Lynch,n.d)

Generally, Universiti Utara Malaysia (UUM) is providing free Wi-Fi to students for daily usage. Wi-Fi is the tool used for getting students connected to the global internet. However, getting connected to the global network may bring positive effects and negative effects at the same time.

Internet helps students to access additional teaching materials easily by reducing the time spent on finding relevant information in the library providing tangible referencing materials. Internet also connects the students to people worldwide. No matter which nation the students are from, with the help of the internet, students can stay connected with family, relatives and friends despite the distance they are separated. Internet helps students in doing group assignments where students can conduct virtual meetings on social applications and get information on related subjects easily. With the internet, there is a new mode of learning being introduced enabling students to carry out distance learning, getting a certificate if they are able to pass certain papers.

While internet connects people without distance matter, internet decreases the social ability of people when they meet face-to-face. The internet creates a virtual relationship between people and causing people are unable to express themselves when they are not associated with gadgets. Distraction from work due to internet is also a negative influence of internet towards students causing students to have poor time management dealing with a deadline of the work. The work ethics of students are suspected, such as cheating in exam and plagiarism in assignments. Internet addiction will influence the physical health of students as they are willing to spend their whole day sitting in front of gadgets supported by internet for entertainment or updates in social applications instead of going outdoors for 30 minutes exercise.

In order to access the information, Google is widely acknowledged as the world's favourite internet search engine (Joint, 2005). In a fast-paced technological world, global and multicultural issues are in the forefront of every-day life in fact students need to develop a more global understanding, acceptance and knowledge of themselves and others (Youssef &Dahmani, 2008).

Google has become the world's favourite search engine and students are using it to assist them in their academic activities. It is believed that Google can bring positive impact on students' academic performance. Based on a research conducted by Cahill (2010), Cahill has focused on identifying how utilizing teaching collaborative technology skills on Google applications, as an instruction tool, would engage students and enhance their communication skills. University professors agreed that collaborative technology was effective to assist students in their academic activities, improved students' communication and collaborative skills and improved students' perceptions and knowledge of technology use in the classroom.

It is important to identify the positive impact that internet has brought to benefits students in their learning process. In order to investigate the effects of internet-based instruction on student learning, Wegner, Holloway and Garton (1999) conducted a research focusing on this title and it is found that Internet-based delivery of coursework appears to have no negative effect on student achievement or on students' perception of their learning. Another study was conducted by Costley about the positive effects of technology on teaching and student learning (2014). We can concluded that positive effects have been resulted from technology on teaching and student learning expectations and outcomes. This study also reiterate that technology integration can increase student motivation, student engagement, student collaboration, confidence in students, increase hands-on learning opportunities, allows for learning at all levels and increase technology skills.

Besides, a study in a Malaysian public university to determine the association between Internet usage and academic performances of students in a public University of Malaysia was conducted (Siraj et al., 2015). Students with high internet usage are found to be associated with higher academic performance. There is positive correlation shown in the duration of

internet use and its effect on academic performances of students. Overall, participants perceived that Internet act as a supplement for learning and resulted in improvement of their academic performance.

The impact of the internet cause also affect the development of students' writing (Mohamed &Ayeche, 2011). This study has claimed that the use of the internet can contribute in improving the students' writing outcomes and is recommended to generalize the new technology in their schools and universities to allow students take a maximum advantage of it.

As demonstrated in Youssef and Dahmani's research study (2008), they have focused on student performance in higher education and found that the usage of information and communication technologies (ICT) has a positive relationship with student performance in higher education. As concluded, ICT seems to have a profound impact on the process of learning in higher education by offering new possibilities for learners and teachers and these possibilities can have an impact on student performance and achievement.

The diversity, accessibility and reliability of the internet resources used by the inexperienced university students during literature review is important as seen in Sahin, Balta and Ercan's research study (2010). Their research has focused on the investigation of the 3 elements of internet resources and contributed that these elements of internet resources used by the inexperienced university students during literature review and they have revealed that reliable sources should be supplied by university administrators. University should provide students access permission for connection to academic resources themselves so that they can have reliable sources to do literature review.

In this technological era, the use of Google has become very common all over the world to make people's life easier. By observation, we found that university students nowadays are depending on the internet especially Google, to assist them for academic purpose. However, if students are not making good use of Google, this might lead them to a wrong path and misused the function of Google. If students are using Google for purposes other than using it on course-related use, students' academic result and performance might be negatively affected.

Therefore, a research about the effect of Google usage on students' academic performance is needed to further investigate whether Google is helping students in achieving better academic results and helps in their learning process.This paper led by the research questions which are:

1. What is the relationship between Google usage and academic performances of students?
2. What is the level of dependency of students using Google as a medium in obtaining course-related information?
3. What is the role of Google that can help students to gain extra knowledge in the learning process?

From the research questions, the aim of this paper is stated as below generally to investigate the effect of google usage on UUM final year students' academic performance.The details of research objectives as below:

1. To determine the association between Google usage and academic performances of students.
2. To determine the level of dependency of students using Google as a medium in obtaining course-related information.
3. To examine the role of Google that can help students to gain extra knowledge in the learning process.

Methodology

Research design is divided into two which includes the study type (descriptive, correlational, semi-experimental, experimental, review, meta- analytic) and sub-type (descriptive longitudinal case study), research question, hypothesis, independent and dependent variables, experimental design, data collection methods and a statistical analysis plan (Research Design, n.d.,Creswell,2012). Thus, this paper led to build a hypothesis to find out the effect of Google against students learning. The data collected is analysed and check whether the hypothesis is met.

Hypothesis 1:

H_0: There is no relationship between CGPA and the duration of Google usage (B1X1) in students UUM.

H_1: There is a relationship between CGPA and the duration of Google usage in students UUM.

Hypothesis 2:

H_0: There is no relationship between the CGPA and the level of dependency (B2X2) of students using Google as a medium in obtaining course-related information.

H_1: There is a relationship between the CGPA and the level of dependency of students using Google as a medium in obtaining course-related information.

Hypothesis 3:

H_0: Google cannot help students to gain extra knowledge (B3X3) in the learning process.

H

[1]: Google can help students to gain extra knowledge in the learning process.

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Data Collection Method

A data of 40 undergraduates students from School of Quantitative Science (SQS) University Utara Malaysia (UUM) will be collected through questionnaire. Google Forms was used to create the questionnaire. The questionnaire been sent to target respondents to be answered. The questionnaire consisting questions like:

1-How much do you agree that Google has help you in achieving better academic results?

2-Will you use Google for obtaining course-related information?

3-Do you think that using Google as a medium to find information is better than using other sources (eg. electronic library, newspaper, academic journals.)?

4-Do you think Google is fast and efficient?

The instrument was in a scale of rating (Ordinal Variable) from 1 to 4 which is from "1 - Strongly Disagree", "2 – Disagree", "3 – Agree" and "4 – Strongly Agree".

Sampling Design

The population of the study is all the final year of undergraduates students in School of Quantitative Science (SQS) University Utara Malaysia (UUM). The population consists of 198 students, 111 students from Bachelor of Decision Science, 45 students from Bachelor of Statistic Industry and 42 students from Bachelor of Business Mathematics.

To obtain the sample size, we use the Slovin's Formula:

Figure 1.

Note: n = number of samples,

N = total population and

e = error margin / margin of error

1 = constant value

From this study, 85% confidence interval and an error margin of 15% was used to obtain the sample size. A sample of 40 undergraduates students in the University Utara Malaysia is selected. Randomization is achieved by using convenience sampling technique randomly so that the sample should be accurate as possible (without any biases). Only undergraduates students is involved because undergraduates students are the only group bounded by the system. Postgraduate and Philosophy of Doctor students are not bounded by the system.

Result and discussion

The data collected then be imported into the IBM Statistic Package for Social Science (SPSS) version 22.0 to be analyzed. Result findings is started by descriptive statistics through demographic characteristics as in Table 1.

Table 1 **:** *Demographic Characteristics*

Sample Characteristics (n=40)	% of sample
Gender	
Male = 9	22.5
Female = 31	77.5
Semester	
6	100
Course	
Business Mathematics =12	30
Decision Science = 17	42.5
Statistics Industry = 11	27.5

Table 1.

Table 2: *The descriptive of the respondent for their CGPA*

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CGPA

		Frequency	Percent	Valid Percent	Cumulative Percent	Bootstrap for Percent[a]			
						Bias	Std. Error	95% Confidence Interval	
								Lower	Upper
Valid	below 3	7	17.5	17.5	17.5	-.4	6.3	2.6	29.8
	3.00-3.32	12	30.0	30.0	47.5	-.2	6.7	17.5	42.4
	3.33-3.67	8	20.0	20.0	67.5	-.5	5.3	10.0	32.4
	above 3.67	13	32.5	32.5	100.0	1.1	7.4	15.2	49.9
	Total	40	100.0	100.0		.0	.0	100.0	100.0

a. Unless otherwise noted, bootstrap results are based on 40 bootstrap samples

Figure 2.

From the response of respondents, there are 13 students (32.5%)with CGPA above 3.67, 8 students (20%) with CGPA 3.33-3.67, 12 students (30%) with CGPA 3.00-3.32 and 7 students (17.5%) with CGPA below 3.00.

Reliability

H_0: The true correlation of every item in the scale with every other item.

H_1: The false correlation of every item in the scale with every other item

Table 3: Realibility Statistics for analysis instrument

Reliability Statistics

Cronbach's Alpha	N of Items
.843	20

Figure 3.

P-value 0.843 >*a 0.7*

Decision: Do not Reject H_o

It showing the data are not significant for reliability and true correlation of every item in the scale with every other item.

Descriptive Statistics

Table 4 Analysis mean to know with question will affect student performance using Google.

Descriptive Statistics			
N	Sum	Mean	
GoogleUsage1	40	111.00	2.7750
GoogleUsage2	40	88.00	2.2000
GoogleUsage4	40	143.00	3.5750
GoogleUsage5	40	141.00	3.5250
GoogleUsage6	40	137.00	3.4250
GoogleUsage7	40	143.00	3.5750
Dependency2	40	139.00	3.4750
Dependency3	40	133.00	3.3250
Dependency4	40	79.00	1.9750
Dependency7	40	121.00	3.0250
Dependency8	40	133.00	3.3250

Dependency9	40	144.00	3.6000
Dependency10	40	139.00	3.4750
Extra1	40	141.00	3.5250
Extra2	40	135.00	3.3750
Extra3	40	134.00	3.3500
Extra4	40	120.00	3.0000
Extra5	40	134.00	3.3500
Extra6	40	138.00	3.4500
Extra7	40	131.00	3.2750
Valid N (listwise)	40		

Table 2.

Based on mean for section A (Google usage), Question 4 and 7 shows the highest mean of 3.5750. For Question 4, students think Google can help students to increase their academic performance and for question 7, students think that Google would assist in doing their assignments. However, question 2 shows the lowest mean of 2.20. Students use less hour on Google for academic purpose per week.

Section B is to investigate the level of dependency of google usage. Question 9 shows the highest mean of 3.60. Students' ratings on the importance of Google is quite high. On the other hand, question 4 shows the lowest mean of 1.98. Students do not really like to use Google to obtain not course-related information.

Section C about using Google can get extra knowledge. Question 1 shows the highest mean of 3.525 where students agree that Google would help them in gaining extra knowledge. The lowest mean of 3.00 goes to Question 4 where students not very agree that Google would help them to learn new language.

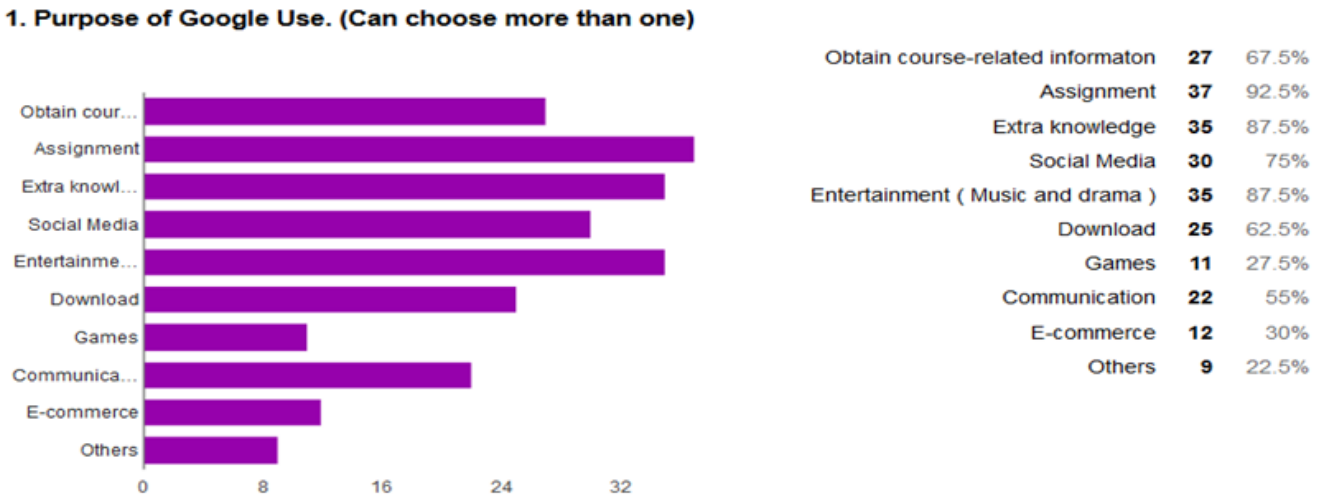

Figure 4.

Figure 1 : The purpose of Google among Final Year SQS students

The Figure 1 above shows question 1 of Section B. The results shown are the purpose of Google use by students. We can say that students like to use Google to do assignment the most because out of 40 students, 37 of them (92.5%) chose that they use Google for assignment purpose. 27 out of 44 of the students (67.5%) will also use Google to obtain course-related information. There is two second most frequently use purpose of Google (87.5%) which are to gain extra knowledge and for entertainment (music and drama) purpose. After that, followed by the use of social media (75%), downloading purpose (62.5%), communication (55%), e-commerce (30%), games (27.5%), and others (22.5%).

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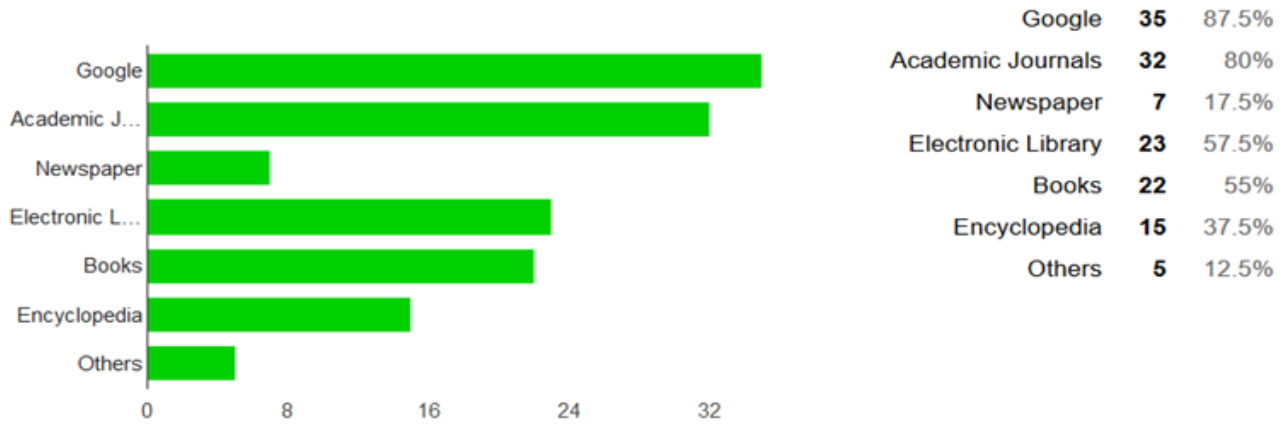

Figure 5.

Figure 2: The sources of information among Final Year SQS students

The Figure 2 above shows question 6 of Section B. The result shows that the most popular source for obtaining course-related information is Google which is chosen by 87.5% of the 40 students. Besides Google, the second most favourable source is finding course-related information from academic journals (80%). The source of favour is then followed by electronic library (57.5%), books (55%), encyclopedia (37.5%), newspaper (17.5%) and other sources (12.5%).

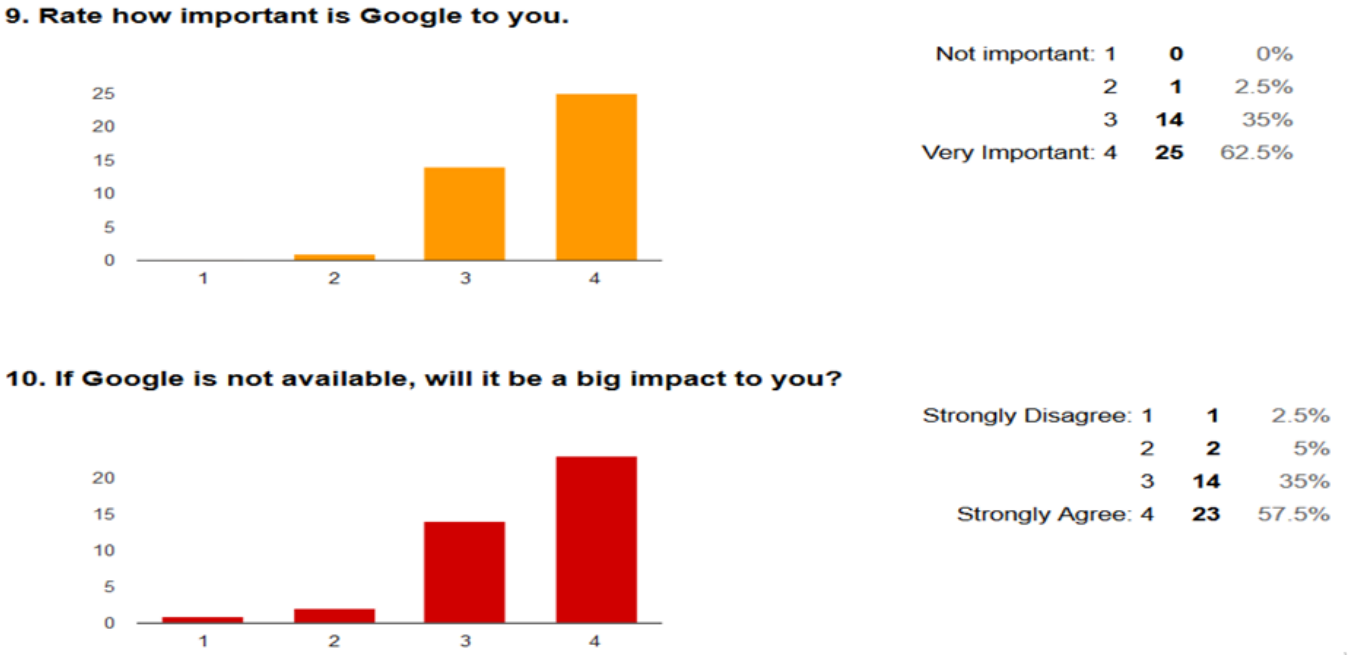

Figure 6.

Figure 3 : The ratings among Final Year SQS students

The Figure 3 above shows question 9 and 10 of Section B. We can conclude that Google is very important to students. 62.5% of the respondents think that google is very important to them. Then, the ratings of important (rating 3) and moderately important (rating 2) are 35% and 2.5% respectively. Overall, no respondents think that Google is not important.

For question 10, we can also conclude that if Google is not available, it will leaves a huge impact for students as 57.5% of the respondents strongly agree with this. Besides, 14 respondents 35% agree that the disappearance of Google will leave big impact on them. However, there are also some respondents which disagree with the statement. 2 of the respondents disagree and 1 of the respondent strongly disagree. We can conclude that students are depending on Google as a source to obtain course-related information and they use Google mostly for assignment purpose. Most students rate that Google is important to them and without it, it will leaves a big impact to them.

Table 5: Test of Normalilty to check whether data meets normality assumption.

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	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
CGPA	.224	40	.000	.837	40	.000
googleusage	.106	40	.200*	.946	40	.054
dependency	.097	40	.200*	.981	40	.709
extraknowledge	.201	40	.000	.892	40	.001
*. This is a lower bound of the true significance.						
a. Lilliefors Significance Correction						

Table 3.

Y= CGPA

B1= google usage

B2=dependency

B3= extra knowledge

Based on Table 3, the dependence variable is CGPA and independence variables are googleusage, dependency and extraknowledge and n=40. Firstly, we need to check for the normality. To test the normality, we use Shapiro-Wilk (N<100) :

1) For B1 and B2

H_o :B1=B2= 0

H_1: B1=B2≠ 0

P-value B1=0.054 and B2=0.709 > a 0.05

Decision: Do not Reject H_o

Conclusion: The data are normally distributed for variable independent google usage and dependency.

2) For B3

H_o :B3= 0

H_1: B3≠ 0

P-value B3=0.001<a 0.05

Decision: Reject H_o

Conclusion: The data are not normally distributed for variable independent extra knowledge.

Since the data is cannot be confirmed yet whether the data is normal or not, then histogram graph as in Figure 4 have to proceed.

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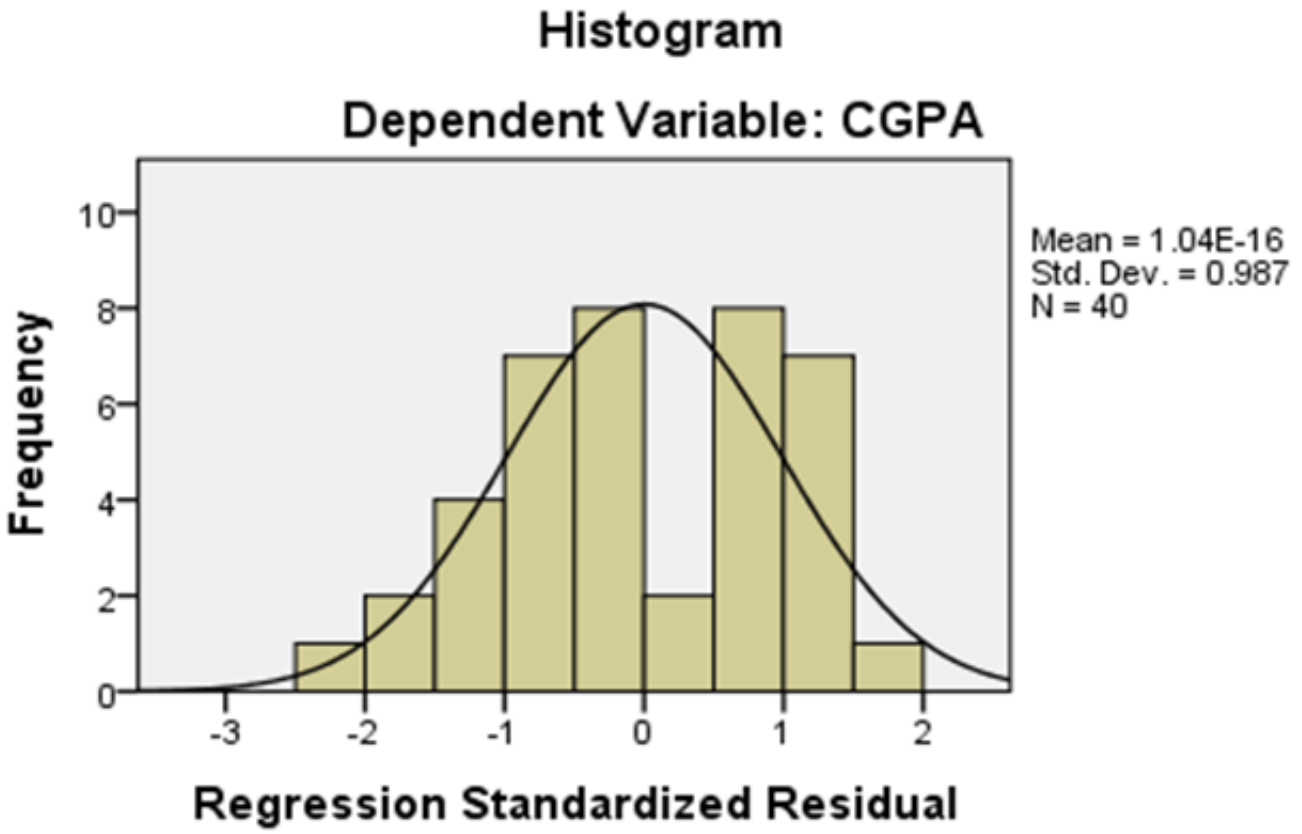

Figure 7.

Figure 4: Normalised process if Data is Not Normally Distributed

Based on the graph, we have a histogram of the standardized residual values, which we expect our data to be close to normally distributed around a mean of zero.

Inferences About The Sample Regression Coefficient

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	extraknowledge, dependency, googleusage[b]	.	Enter
2	.	googleusage	Backward (criterion: Probability of F-to-remove >= .100).
3	.	extraknowledge	Backward (criterion: Probability of F-to-remove >= .100).

a. Dependent Variable: CGPA

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Figure 8.

The Variables Entered/Remove as in Figure 5 above shows that two variable were removed. While, the method used were backward elimination procedure.

Table 6: Equation Of The Model

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-.713	1.587		-.449	.656	-3.933	2.506
	googleusage	-.127	.517	-.051	-.246	.807	-1.175	.921
	dependency	.992	.575	.344	1.724	.093	-.175	2.159
	extraknowledge	.246	.472	.097	.521	.606	-.711	1.202
2	(Constant)	-.780	1.544		-.505	.616	-3.908	2.348
	dependency	.924	.499	.320	1.853	.072	-.087	1.935
	extraknowledge	.206	.437	.081	.470	.641	-.680	1.092
3	(Constant)	-.423	1.331		-.318	.752	-3.118	2.271
	dependency	1.034	.437	.358	2.366	.023	.149	1.918

a. Dependent Variable: CGPA

Figure 9.

$\hat{y} = \beta 0 + \beta 1\ X1 + \beta 2\ X2 + \beta 3\ X3$FULL MODEL

$\hat{y} = -0.713 - 0.127\ X1 + 0.992\ X2 + 0.246\ X3$

$\hat{y} = \beta 0 + \beta 2\ X2$REDUCED MODEL

$\hat{y} = -0.423 + 1.034\ X2$

Table 7: Test For Overall Model Of Significance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.807	3	2.269	1.874	.151[b]
	Residual	43.593	36	1.211		
	Total	50.400	39			
2	Regression	6.734	2	3.367	2.853	.070[c]
	Residual	43.666	37	1.180		
	Total	50.400	39			
3	Regression	6.473	1	6.473	5.599	.023[d]
	Residual	43.927	38	1.156		
	Total	50.400	39			

a. Dependent Variable: CGPA

b. Predictors: (Constant), extraknowledge, dependency, googleusage

c. Predictors: (Constant), extraknowledge, dependency

d. Predictors: (Constant), dependency

Figure 10.

Ho :β1=β2=β3=0

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H_1 : At least one $\beta1=\beta2=\beta3 \neq 0$

P-value $\beta2= 0.023 < a\ 0.05$

Decision: Reject H_o

Conclusion: Our overall model is significant.

Table 8: Test For Individual Regressor

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-.713	1.587		-.449	.656	-3.933	2.506
	googleusage	-.127	.517	-.051	-.246	.807	-1.175	.921
	dependency	.992	.575	.344	1.724	.093	-.175	2.159
	extraknowledge	.246	.472	.097	.521	.606	-.711	1.202
2	(Constant)	-.780	1.544		-.505	.616	-3.908	2.348
	dependency	.924	.499	.320	1.853	.072	-.087	1.935
	extraknowledge	.206	.437	.081	.470	.641	-.680	1.092
3	(Constant)	-.423	1.331		-.318	.752	-3.118	2.271
	dependency	1.034	.437	.358	2.366	.023	.149	1.918

a. Dependent Variable: CGPA

Figure 11.

For B2 (dependency)

$H_{o:}$ B2= 0

$H_{1:}$ B2≠ 0

P-value 0.023 < *a 0.05*

Decision: Reject H_o

Conclusion: The data is significant for variable independent dependency.

Table 9: Coefficient Of Determination And Coefficient Of Correlation

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Model Summary[d]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.368[a]	.135	.063	1.100	
2	.366[b]	.134	.087	1.086	
3	.358[c]	.128	.105	1.075	1.669

a. Predictors: (Constant), extraknowledge, dependency, googleusage

b. Predictors: (Constant), extraknowledge, dependency

c. Predictors: (Constant), dependency

d. Dependent Variable: CGPA

Figure 12.

R^2=0.128**(Coefficient of Determination)**

Interpretation:

12.80% variation in CGPA is explained by dependency (X2).

The closer to 1 the value R^2 is, the better the 'fit' of the regression line to the data.

R=0.358 (**Coefficient of Correlation)**

Interpretation:

There is a weak positive correlation between CGPA is explained by dependency (X2).

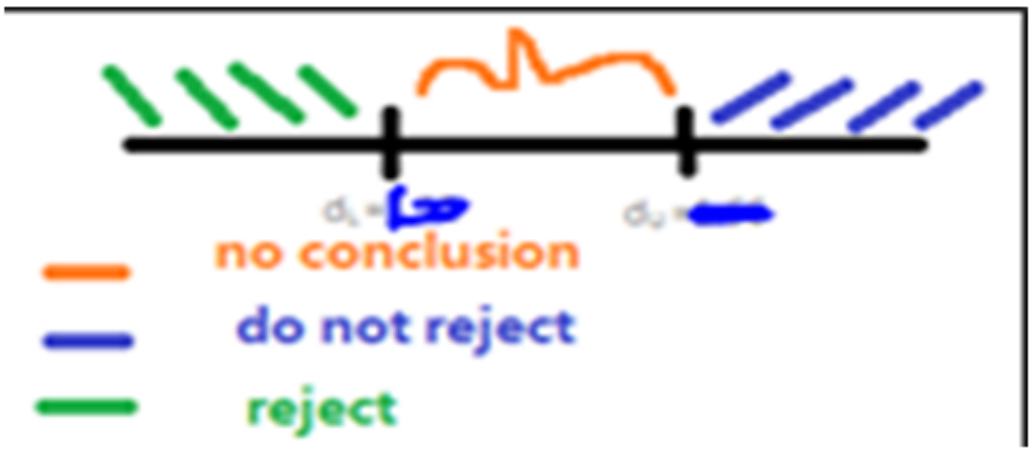

Figure 13.

Figure 5:Durbin-Watson Test To Test Error

n= 40, <100 (Durbin-Watson Test)

1. H_0 : Error term is not correlated

H_1 : Error term is correlated

2. Durbin-watson value = 1.669

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3. Durbin-watson table : n = 40, α=0.05, k=1

d_L =1.44, d_U =1.54

4. Do not reject H_0

5. Error term is not correlated

Table 10: Durbin -Watson Test Probability

		X variables, excluding the intercept									
Observations		1		2		3		4		5	
N	Prob.	D-L	D-U	D-L	D-U	D-L	D-U	D-L	D-U	D-L	D-U
15	0.05	1.08	1.36	0.95	1.54	0.82	1.75	0.69	1.97	0.56	2.21
	0.01	0.81	1.07	0.7	1.25	0.59	1.46	0.49	1.70	0.39	1.96
20	0.05	1.20	1.41	1.10	1.54	1.00	1.68	0.90	1.83	0.79	1.99
	0.01	0.95	1.15	0.86	1.27	0.77	1.41	0.68	1.57	0.60	1.74
25	0.05	1.29	1.45	1.21	1.55	1.12	1.66	1.04	1.77	0.95	1.89
	0.01	1.05	1.21	0.98	1.30	0.90	1.41	0.83	1.52	0.75	1.65
30	0.05	1.35	1.49	1.28	1.57	1.21	1.65	1.14	1.74	1.07	1.83
	0.01	1.13	1.26	1.07	1.34	1.01	1.42	0.94	1.51	0.88	1.61
40	0.05	1.44	1.54	1.39	1.60	1.34	1.66	1.39	1.72	1.23	1.79
	0.01	1.25	1.34	1.20	1.40	1.15	1.46	1.10	1.52	1.05	1.58
50	0.05	1.50	1.59	1.46	1.63	1.42	1.67	1.38	1.72	1.34	1.77
	0.01	1.32	1.40	1.28	1.45	1.24	1.49	1.20	1.54	1.16	1.59
60	0.05	1.55	1.62	1.51	1.65	1.48	1.69	1.44	1.73	1.41	1.77
	0.01	1.38	1.45	1.35	1.48	1.32	1.52	1.28	1.56	1.25	1.60
80	0.05	1.61	1.66	1.59	1.69	1.56	1.72	1.53	1.74	1.51	1.77
	0.01	1.47	1.52	1.44	1.54	1.42	1.57	1.39	1.60	1.36	1.62
100	0.05	1.65	1.69	1.63	1.72	1.61	1.74	1.59	1.76	1.57	1.78
	0.01	1.52	1.56	1.50	1.58	1.48	1.60	1.46	1.63	1.44	1.65

Figure 14.

N=40, α =0.05, K=1, d_L =1.44, d_U =1.54

Conclusion

For hypothesis 1 and 3, this study have to reject H_0 about relationship between CGPA and the duration of Google usage in students UUM and Google can help students to gain extra knowledge in the learning process. It means there is no relationship between CGPA and the duration of Google usage in students UUM and Google can help students to gain extra knowledge in the learning process.

For hypothesis 2, H_0 is rejected about relationship between the CGPA and the level of dependency (B2X2) of students using Google as a medium in obtaining course-related information. It means there is a relationship between the CGPA and the level of dependency (B2X2) of students using Google as a medium in obtaining course-related information. It showing the pattern the Google usage are heavily depending in academic perfomarnce. In Millenial generation, Internet and Google is the most significant facilities to university student. In addition, in adating the IR 4.0 revolutionary also as one of the booster for Intrenet and Google usage among university's student.

Acknowledgement

This research received no specific grant from any funding agency in the public, commercial, or not-for profit sectors. This research are as part of project paper for those enrol Research in Quantitative Sciences 1 courses in School of Quantitative Sciences.

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