

Internet Usage and Academic Performance of Sri Lankan Undergraduates

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Abstract

Internet is an ever-changing concept and has become a useful instrument which has fostered the process of making the world a global village. A universally accepted fact is that this concept has a great impact on student's academic achievements and social life. Thus, the purpose of this research is to identify the impact of internet usage on academic performance among Sri Lankan undergraduates. The study will aid university students, researchers, lecturers and curriculum developers to identify the correlation between internet usage and academic performance. Three main areas were looked at with regard to internet usage academic, social and recreational oriented internet utilization. Quantitative data was gathered from 114 Sri Lankan undergraduates through questionnaires and six other students were approached to obtain qualitative data for in-depth understanding. The data collected was analyzed using the SPSS software and statistical measures used to identify patterns were; one-way ANOVA, descriptive analysis and Pearson correlation technique. When comparing results obtained from both qualitative and quantitative means a significant relationship amid internet usage and academic performance can be identified.

Keywords: Internet Usage, Internet Addiction, Academic Performance

Introduction

Background

The global phenomenon as we all know; the Internet has consumed more than three-quarter of the world's population and as of 1st January 2018 total active users across the world was 4,156,932,140 (Peru, 2018) and within that magnitude Sri Lanka has over 6 million active users (Internetworldstats, 2018). As outlined by Miller and Slater (2003), the internet is progressively shaping and being shaped by users' lives and is utilized as a supplemental

convenient method. This concept is used by a multitude as afore mentioned and has impacted social lives of individuals, leisure, community well-being, consumer and economic (Bodhi and Kaur, 2017). According to McLuhan, (1964), the internet has narrowed down the cosmic world to a sophisticated 'globalvillage'.

As Dorji, (2015) remarks, the internet offers an assortment of powerful apparatuses which may aid in altering the contemporary secluded text book and teacher centric lecture halls into studentfocused, rich and interactive knowledge bound environments. This phenomenon was defined as a 'sea of information', encompassing transcripts which are incapable of only being housed amid libraries and book shop partitions and it spans across subject areas of all fields of knowledge (Awais et al., n.d.)

Many see the internet to be a priceless spring of information for students of all ages alongside an instrument which will augment their efficiency (Jones, 2002; Metzger, Flanagan and Zwarun, 2003; Kirschner and Karpinski, 2010). Thus undergraduates are deemed as heavier users of the internet in comparison to the broader community (Jones, 2002; Choi et al., 2009; Ni et al., 2009; Judd and Kennedy, 2010).

Suhail and Bargees (2006) described a few benefits for college students when given internet access; they specified that internet usage creates a optimistic impact on education by acting as a tool which increases communication with colleagues and lecturers, accessing to libraries and educational databases more often while cultivating study habits and time spent on studying.

Despite afore mentioned positivity, some research verdicts also showcase that excessive internet usage adversely affect individual's family-life, physical health and academic performance (Akhter, 2013). Academic complications comprises deterioration in study habits, grades drop drastically, reduction in attendance and poor interest in extracurricular activities. This can be due to higher engagement than normal in internet usage; to play online games, addiction to social media, watching movies and music videos online among many others. It's informed that Internet has a noteworthy decrement onto students' performance by multiple researchers; inability to utilize their full potential, opt to plagiarizing work and increased dependence on the Internet as well.

In context to Sri Lanka, we have the potential to keep developing an entrepreneurial culture along with creativity and innovation (Daily FT, 2018). ICT, in particularly the internet has deeply penetrated into the educational arena as well. According to the below table, the Sri Lankan population belonging to the adolescent-youth category has the highest internet usage as opposed to those of other categories.

Gender, Sector, Age group	Computer Literacy	Digital Literacy
Sri Lanka	28.3	38.7
By Sex		
Male	30.7	42.5
Female	26.1	35.2
Sector		
Urban	41.1	54.5
Rural	26.5	36.4
Estate	9.5	16.4
By Age group(years)		
5 - 9	14.8	21.5
10 - 14	41.7	48.7
15 - 19	60.7	71.4
20 - 24	55.1	71.1
25 - 29	45.8	64.5
30 - 34	33.4	52.1
35 - 39	25.1	40.5
40 - 49	19.9	31.6
50 - 59	11.0	16.5
60 - 69	6.3	9.1

Figure 1: Computer literacy rate by Gender, Age & Sector

Source: Department of Census and Statistics (2017)

Problem Statement

As outlined previously, internet usage is snowballing at an increasing rate and in 2017 there was a 20% rise in internet connections (Sunday Observer, 2018). This internet usage has also made a negative impact on mental health of the youth in Sri Lanka according to a research published by Weerasundera, (2014); several suicides amid other mental health problems have occurred due to excessive internet usage according to the article. However, in an article published in UNDP Sri Lanka by Thivanka, (2016), he mentions that even family relationships are affected by this and life style change among the younger generations are observed. In addition, he mentions that more employment opportunities and a growing industry- 'Startup Industry' is fueled by the internet usage as well, headed by the younger generations.

A research conducted by Sachitra, (2015), using the students of University of Sri Jayawardenapura B.Com undergraduates as the sample further reaffirms that there is a problem which needs to be looked at, since the results revealed that addiction towards internet deemed to have a noteworthy undesirable influence on academic performance of undergraduates. Thus, it's to be questioned beforehand that, is the sense of productive internet use inculcated in the mindset of undergraduates- since chatting online, gaming, online movies, music, etc. would sum up how most undergraduates apply ICT at present.

Conferring to varied literatures, students' academic enactment is either negatively/positively stimulated by the internet worldwide and Sri Lankan undergraduates are no exception when they have the access to the internet equally for academic, social and recreational purposes. Some researchers found that internet elevates academic performance of the undergraduates while a few researches showed adverse effect of the internet on academic performance.

Based on the literature that had been undertaken in the Sri Lankan Context it was found that the literature with related to the same area had identified the relationship that academic performance has with other factors like, personality of the undergraduates, verbal communication skills and other influencing factors. However; the relationship between the academic performance and ICT usage of undergraduates has not given the required attention in the Sri Lankan context.

There are limited number of studies conducted regarding the internet impact on academic performance of undergraduates in Sri Lanka. Therefore, behind those western dissenting opinions on the impact of the internet on academic performance, it's important to study if

these controversies stand true for Sri Lankan undergraduates as well. Hence it's very paramount to research regarding the impact of the internet on academic performance of the Sri Lankan undergraduates.

Research Questions

RQ1: What do Sri Lankan Undergraduates use the Internet for? How much time do Sri Lankan Undergraduates spend on the internet for academic purpose, social purpose and recreational purpose?

RQ2: Is there any difference between the gender and the internet usage?

Research Objectives

General Objective

- 1) To explore the influence of internet usage on academic performance

Specific Objectives

- 1) To determine the purpose and intensity of internet usage by undergraduates
- 2) To determine whether there is a difference of usage amid faculties
- 3) To determine the influence of the type of usage (academic/ nonacademic) on GPA

Literature Review

Internet as a Concept

According to a research conducted by Annenberg School of University of Southern California (2000), they concluded that the internet has a comprehensive effect on every aspect of individual's lives at present regardless of geographical boundaries. In simple, this singularity can be termed as a 'global data highway'; any individual given the means, is able to tour on this electronic path to exchange, obtain or provide information to establishments dispersed across the world (Mirabito and Morgenstern, 2001:189). Wells (2000) this is described as a computer mediated communication apparatus, offering entities access to a wide-ranging spectrum of data and distinctive expertise.

Journal of Vocational and Technology Education (2002), M.B.K Shitta speculates that the internet is a path that acquaints, pegs and emphasizes the whole world into a global community, where individuals from anywhere in the world can easily get in touch with one another, view or communicate and interchange information from one point of the sphere to another. A visual presentation (Figure 2) of the factors which influence internet usage and a few positive and negative impacts of it has been compiled by Wanajak (2011).

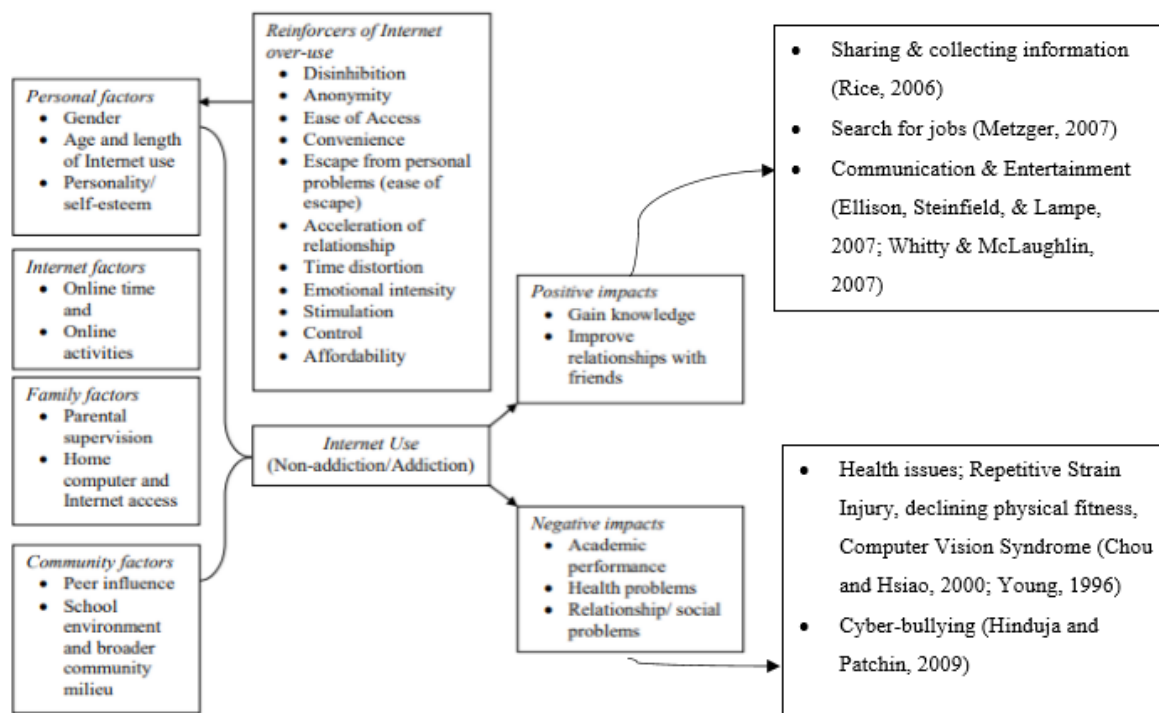


Figure 2: Conceptual Model of Factors which may influence the internet Usage

Usage of Internet in University Environment

As Underwood (2003) articulates, many advancements in the technology sphere is bringing about a massive impact on education. Regardless of the negative impacts, universities are intensifying their investments in IT and explicitly the internet, while also vigorously endorsing internet-using practices in academia teaching (Al-Nuaimy, Zhang and Noble, 2001; Barger et al., 2002; Chandler, 2002; Chen and Paul, 2003; Dringus, 1999; Huang et al, 2004).

Lecturers are being requested to incorporate the internet when teaching- to make teaching resources, additional reading and supplementary material reachable through internet and scholars are also encouraged to connect with their lecturers/instructors or with each other through e mail (Alavi, 1994; Barker, 2002; Coppola, Hiltz and Rotter, 2002; Lee, 2001; Topper, 2002). While universities are sponsoring internet usage as Frank, Reich and Humphreys (2003) states, they should also understand students' attitude towards utilizing it.

Palloff and Pratt (1999) mentions that instructors have long considered introducing novel technology to the classroom with the anticipation of fostering erudition, enhance focus-minds and stimulate student interests. Undeniably, with the advent of internet, it has brought upon innovative prospects for lecturers to productively convey module material to pupils (Carswell et al., 2000). Kekkonen- Moneta and Moneta (2002) with the aid of the work done by Xie and Zhang (1999), equated undergraduates learning outcomes in lecture with an online form of preparatory computer module. Both online and lecture students attained equivalent factual learning outcomes. Furthermore, the online students were able to outperform the students who visited lectures only in applying conceptual knowledge. These conclusions propose that the usage of prudently design cooperative learning units can meritoriously foster upper order learning outcomes.

Although, internet usage in college edification is getting much pervasive and offers a supplementary method to traditional teaching means, further extensive researches must be

compiled to comprehensively apprehend the variables which lead to better learning and higher student performance (Waiman, Cheung and Wayne Huang, 2005).

Regardless of the positivity linked with internet usage, there is a rising concern about risks accompanying overuse/misuse. There are manifold of studies which shows undergraduates have developed addictions towards the internet and thus triggered significant drawbacks on student academics; a study done by Mohammadi and Torabi (2018) showed that internet addiction affects moral development and social self-efficacy and has a significant effect on academic failures among students. Educational failure includes various aspects of academic failure, such as absenteeism from school, temporary dropout, re-entry of a basic education, and descending from a satisfactory level of education to an undesirable level (Vahidi and Baratali, 2017).

Academic Oriented Utilization

This theme is confined to utilization of internet for academic purposes; research, assignments, class room tasks, homework, presentation among other academic purposes.

Increasing internet usage and impact of student academic performance is an area which is continually debated upon by many academicians and researches as stated by Englander, Terregrossa and Wang (2010). Present scenario outlines that, quantity of students accessing the internet multiplies on a yearly basis and hence if students use the internet for academic purposes their performance in academic context will be augmented (Brown, Ellore and Niranjan, (2014).

A non-profit organization- EDUCAUSE (Colorado, USA) piloted a survey (2011) and gathered 3000 undergraduates from 1179 US universities to test uses of internet. They found out that students utilize internet for personal uses and educational discourse, while students also felt that cyber classrooms empowered them to learn more in comparison to conventional classroom means (Dahlstrom et al., 2011).

Young (2006) compiled a research regarding the 'Effect of internet and social capital on academic performance in Korea', which showcased that only the pupils with better academic grades spend greater amount of time online compared to others. While it was also concluded that over threequarter of survey respondents believe that the internet is the most vital source of information for extensive knowledge, entertainment and wisdom. Students are benefited by internet specifically while conducting research, seeking new ideas and communicating with their resource guides and friends (Jones et al., 2007)

A survey conducted at a university in the US by Matthews and Schrum (2003), revealed that a significant positive correlation amid grade performances and perception of internet as a beneficial academic instrument. Further Cheng and Huang (2005) found out that internet significantly correlates with student capability to learn as well as their job prospects.

According to researcher Mbah (2010) students from the University of Buea view as ICT having a positive effect on their learning habits (90% male students and 73% female students support this view). He also concluded that due to hypertext, multimedia resources, journals and additional material these students use ICT on a daily basis to support their studies.

In developing countries context, Okello-Obura and Magara (2008) examined electronic info right of entry and usage in East African School of Library and Information Science- Makerere University, Uganda. 190 out of 250 target students provided a reply percentage of 76% and it was exposed that they derived multiple benefits through academic-oriented internet use. While it aided them to also obtain access to a widespread range of information and thus in turn enhanced their academic performance and understanding of subject matters as a result

of access to quality information. Authors have also suggested that the internet proves to have a positive effect on academic achievement due to educational software and provision of useful information, however if the usage is not regulated, excessive usage may hinder development and increase negative reliance on internet (Brozekowski and Robinson, 2005). According to the study conducted by Asdaque, Khan and Rizvi (2010), they concluded that internet usage for academic purposes and academic performance is directly proportional to each other; CGPA of students will be negatively affected if the number of hours spent on the internet is mainly for non-academic purposes and vice-versa.

Social Oriented Internet Utilization

This theme revolves around the use of internet for social interactions and communication via social networking sites.

As defined by Chao and Hsiao (2000), internet addiction is 'a person's incapability to regulate his/her internet usage, which in turn leads to school, social, psychological and/or work related complications'. Being addicted to social oriented use of the internet affects a student's performance in a negative manner (Brown, Ellore and Niranjana, 2014). Academic problems caused due to this are; decline in studying habits, drastic reduction of grades, poor attendance and reduced integration in extracurricular activities (Akhter, 2013). As afore mentioned, Akhter (2013) further reinstates that excessive use of the internet or addiction adversely affects academic performance, physical health and academic performance.

Under social oriented internet use, the main platforms are Facebook, Twitter, LinkedIn, Snapchat, Instagram and other related sites (Coyne, Padilla-Walker and Howard, 2013). A survey directed by Engalnder, Terregrossa and Wang (2010) implied that a negative relation amid time spent on internet on a weekly basis and student exam performance exists. Using social media has been of prominence in the student community, thus academic institutions among parents have been somewhat fretful regarding its impact on academic performance. Utilizing the above mentioned platforms at a moderate level is harmless since with the current trends there is a mass necessity to be a part of the on-demand economy, however excessive usage results in a negative association amid time spent on social media networks and academic performances (Paul, Baker and Cochran, 2012). This scientific interpretation was further backed up by Kirschner and Karpinski (2010) stating that platforms like LinkedIn and Facebook can be used as a medium for employment searches and will aid in career building. Researchers have also hypothesized that university students are subjected to high risk for developing internet addiction (Akhter, 2013). As further supported by Kandell (1998) possible reasons for this could be; available free time, less monitored by parents, to find solace from tough university schedules, influence from colleagues among others. Using internet excessively is associated with complications relating to performing daily chores, academic performance and family relationships (Rickert, 2001). While Kim (2011) too supports this and adds a statement articulating that 'true social and recreational use of internet are important for any human, however excessive usage is directly associated with low academic achievements'.

Recreational Oriented Internet Utilization

This theme demarcates utilizing the internet for recreational plus entertaining purposes; online gaming, watching online movies, music, downloads, etc.

Brown, Ellore and Niranjana (2014) states that the proportion of time university students spent following this theme; online movies, music, gaming among other purposes can significantly

determine academic success of students. The primary reason for internet use by adolescents in South Korea are for entertainment or recreation trailed by information seeking, stress reduction and socialization (Kim, 2011).

Majority of parents provide internet facilities for their children in order to use it for educational purposes (Lenhart, Raine and Oliver, 2001), however as cited by Kim (2011), most of them prefer to use the internet for leisure and entertainment purposes.

Gender Difference and Internet Usage

Numerous amounts of past studies document that males use the internet in a frequent manner, for a longer time period and for wider varieties in comparison to females (Gross, 2004; Haythronthwaite and Wellman, 2002) and males tend to spend more time alone online than females engaged in gaming (Subrahmanyam et al., 2001). Further supported by Dorji (2015) internet use does differ amid male and female genders.

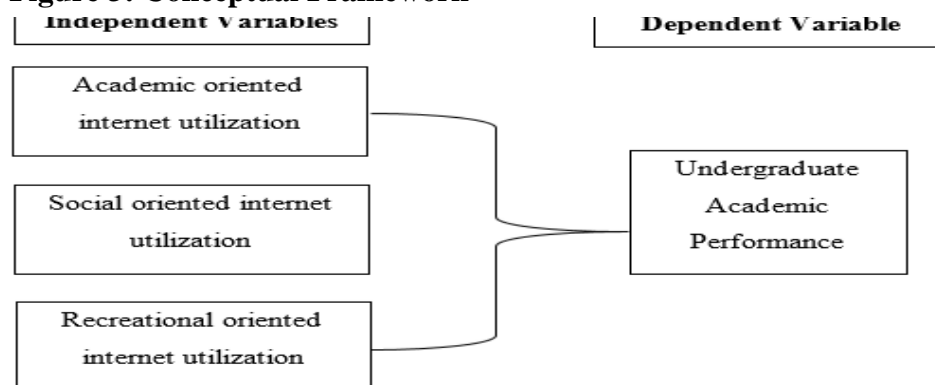
Weiser (2000) described a significant gender difference in internet usage; he mentioned that males incline to be much acquainted with know-hows regarding computers and the internet in comparison to females. Further even Morahan-Martin and Schumacher (2000) also mentioned that males were more probable to be pathological internet users compared to females. As cited in Akhter (2013), Scherer (1997) suggested that the male fraction deems to of a larger number in terms of internet usage compared to the female fraction and Tsai et al. (2009) mentions that this is mainly due to more family supervision on females than men, mainly seen in the eastern and Asian cultures.

After a thoughtful Literature Review, it was identified that there are a number of research conducted under the theme 'impact of internet usage on academic performance'. However issues related to applicability to the Sri Lankan context due to cultural differences impacting generalizability have formed a knowledge gap when aiming to apply the findings. Thus, this research will address the knowledge gap coherently by selecting a sample related to the context in question. In order to address the research gap, the present study will use the understandings derived from the above mentioned literature review to develop the research methodology of the present study in order to obtain both qualitative in quantitative responses. The interpretations will aid us in understanding the impact of internet usage on Sri Lankan undergraduates.

Based on the literature review the following conceptual framework was derived.

Conceptual Framework

Figure 3: Conceptual Framework



Source:
Author
(2019)

Research Approach

Research Design

The study will be based on positivism philosophy while the approach used is deductive reasoning. A quantitative research design (Descriptive) was utilized in essence in order to determine the relationship between the dependent and independent variable. However in order to gather opinions which are high in validity and provide a rich understanding of the knowledge gap, the present study utilized a qualitative approach as well. The variables of the study is as follows,

Independent Variable: Internet Usage (Academic, Social and Recreational oriented internet utilization)

Dependent Variable: Undergraduate's academic performance

Target Population and the Sample

The study aimed at finding the impact of Internet Usage on the Academic Performance of the Sri Lankan Undergraduates. Thus; the target population of the study was the Sri Lankan undergraduates currently doing their studies in the Sri Lankan Universities. Based on non-random convenience sampling technique a leading higher educational institute in Sri Lanka was taken into the study and based on the simple random sampling technique required data was collected from 100 undergraduates in the selected leading higher educational institute. This sampling techniques is used due to ease of gathering required data and due to the limited time frame.

Research Instrument

Both primary and secondary data were gathered; Primary data were gathered through a self-administered questionnaires and the secondary data was gathered through research articles, studies done by other entities and books. The online Google form titled 'Impact of Internet Usage on Academic Performance' was sent out to the sample using social media platforms (Example: Facebook, WhatsApp, etc). A Google form was used since the topic revolves around internet usage and due to time constraints. In order to obtain more valid and first-hand information, a semi-structured interview was utilized as well.

Data Analysis

The data gathered by the Google forms were exported to Microsoft Excel and thereafter examined and analyzed using the SPSS V. 22 software.

Findings

Discussion of the Survey Findings

The foundation of the present study is based primarily on the findings gathered via quantitative approach using self-administered questionnaires. The sample consisted of 114 undergraduates in the selected leading higher educational institute in the country, representing students from the business, computing and engineering faculties.

The following diagram depicts Cronbach's alpha values which is a measure of internal consistency; how closely related a set of elements are as a group. As per the values obtained, there is a Cronbach's Alpha value of 0.761 which suggests that there is a high internal consistency.

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of items
.761	.771	114

Figure 4: Reliability Statistics

Discussion on Demographics

The sample consisted of a total of 114 respondents from which more male respondents (67) answered in comparison to less female responses (47). More students of the sample was from the business faculty (38.6%) responded in comparison to computing (20.2%) and Engineering (36%).

Table 1:
Demographics

Male or Female				
	Frequency	Percent	Valid Percent	Cumulative Percent
Male	67	58.8	58.8	58.8
Female	47	41.2	41.2	100.0
Total	114	100.0	100.0	

Age				
18-20	26	22.8	22.8	22.8
21-23	77	67.5	67.5	90.4
24-26	10	8.8	8.8	99.1
Above 29	1	.9	.9	100.0
Total	114	100.0	100.0	

Faculty you are currently studying				
Computing	23	20.2	20.2	20.2
Business	44	38.6	38.6	58.8
Engineering	41	36.0	36.0	94.7
Other	6	5.3	5.3	100.0
Total	114	100.0	100.0	

Year of Study				
1st Year	31	27.2	27.2	27.2
2nd Year	34	29.8	29.8	57.0
3rd Year	37	32.5	32.5	89.5
4th Year	12	10.5	10.5	100.0
Total	114	100.0	100.0	

Discussion on the Descriptive Analysis

Table 2:

Descriptive Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Internet is useful for my studies	114	0	2	.27	.503
My productivity can be increased with the use of internet	114	0	3	.78	.662
I can accomplish my tasks much faster with internet	114	0	4	.60	.688
I feel that the internet is a distraction to my academic learning activities	114	0	4	1.67	.928
Using the internet will increase my chances of obtaining a higher GPA	114	0	4	1.18	.875
Social media provides a useful platform for academic group work	114	0	4	1.17	.921
I can self-study using the internet therefore I do not need to attend lectures	114	0	4	1.68	1.109
Valid N (list wise)	114				

Based on the above descriptive analysis, according to the highest mean value received it is suggested that most of the undergraduates are using Internet because “the student can self-study using the internet therefore the respective student doesn’t need to attend lectures. The lowest mean value was received for the statement “Internet is useful for my studies”. However; these mean values suggest that although the undergraduates perceive that relatively less importance in the usage of internet tool as a support for their studies they seems to be actually using the internet tool in self-studying when they are unable to attend lectures.

In the present study the second sub objective of the study was to determine whether there is a difference of usage of internet among the faculties. In order to meet this objective ANOVA analysis was carried out.

Table 2:
ANOVA Analysis

ANOVA					
Internet_usage					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	42.784	3	14.261	.950	.0419
Within Groups	1651.286	110	15.012		
Total	1694.070	113			

Through the ANOVA analysis based on the significant value received which is 0.0419 (which is below 0.05) it was determined that there is a statistically significant difference among the usage of internet in between the undergraduates in 3 different faculties (Faculty of Business, Faculty of Computing and Faculty of Engineering) considered in the sample.

A regression analysis was conducted in order to determine the 3rd specific objective in the study which was to determine the influence of the type of usage (academic/ nonacademic) on GPA. The regression analysis was taken as two elements for the convenience of the discussion as Internet usage for academic purpose and Internet usage for non-academic purpose during the analysis.

Table 3: Internet Usage for Academic Purpose

Variables Entered/Removed ^a			
Model	Variables Entered	Variables Removed	Method
1	Internet_usage_academic ^b		Enter

a. Dependent Variable: Grade Point Average

b. All requested variables entered

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.319 ^a	.101	.093	.719

a. Predictors: (Constant), Internet_usage_academic

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.538	1	6.538	12.652	.001 ^b
	Residual	57.883	112	.517		
	Total	64.421	113			

a. Dependent Variable: Grade Point Average

b. Predictors: (Constant), Internet_usage_academic

Coefficients					
Model		Unstandardized Coefficients		Standardized Coefficients	t
		B	Std. Error	Beta	
1	(Constant)	1.903	.138		13.764
	Internet_usage_academic	-.144	.040	-.319	-3.557

a. Dependent Variable: Grade Point Average

Model Summary

For multiple regression analysis, the adjusted R square is considered which is the r square value adjusted to adding more independent variable to predict the dependent variables. Therefore it can be interpreted that 9.3% of a variation of the overall usage of internet by the undergraduates can be explained by the combination of the independent variables.

ANOVA - Based on the p Value (sig.) being less than 0.05, it indicates that this model is statistically significant in predicting the outcome variable of overall satisfaction

Coefficients - The b coefficients tell us how many units of internet usage increases for a single unit increase in each predictor.

Table 4:

Internet Usage for Academic Purpose

Variables Entered/Removed ^a			
Model	Variables Entered	Variables Removed	Method
1	Internet_usage_no nacademic ^b		Enter

a. Dependent Variable: Grade Point Average

b. All requested variables entered.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.189 ^a	.036	.027	.745

a. Predictors: (Constant), Internet_usage_nonacademic

ANOVA ^a					
Model		Sum of Squares	df	Mean Square	F
1	Regression	2.302	1	2.302	4.151
	Residual	62.119	112	.555	
	Total	64.421	113		
					Sig.
					.044 ^b

a. Dependent Variable: Grade Point Average

b. Predictors: (Constant), Internet_usage_nonacademic

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.737	.147		11.841	.000
Internet_usage_nonacademic	-.047	.023	-.189	-2.037	.044

Dependent Variable: Grade Point Average

Model Summary

It can be interpreted that 2.7% of a variation of the overall leadership perception can be explained by the combination of the independent variables.

ANOVA - Based on the p value (sig.) being less than 0.05, it indicates that this model is statistically significant in predicting the outcome variable of overall satisfaction

Coefficients - The b coefficients tell us how many units of internet usage increases for a single unit increase in each predictor

Discussion of the In-Depth Interview Findings

In order to obtain a rich understanding; semi-structured interview method was used which incorporated responses from six students of both genders (Business-2, IT-2, and Engineering-2) following undergraduate pathways in the selected higher educational institute. The findings are interpreted below,

Out of the six students 3 male students were identified using the internet at least 9 hours for a day mainly for gaming; PUPG, COD and Fortnite. The girls however used the internet for 3-4 hours on average basis to do their assignments or to use social media platforms. All six of the students were tech savvy since they had to utilize tech components to fulfill assessment criteria. With regards to the internet problems noticed within the selected higher educational institute, 5 out of 6 mentioned slow connections during the day which has been an obstacle for them when compiling their assignments and due to this reason 4 out of the 6 students have opted to bring their own routers to the University premises.

Academic Oriented Utilization: All 6 of them utilize the internet to compile their assignments while the students from the IT faculty seemed to be heavy uses of the internet for this purpose since they mentioned that most of their modules require additional knowledge and watching educational videos and researching on these subject areas is what aids them in getting manageable grades. However, out of the 6, 2 were unsure if the internet aided them in achieving better results or if it was their own knowledge power and attentiveness in class. They all stated 'Yes' when asked if the internet is a reliable source for academic tasks, however one also mentioned that 'despite the internet being a knowledge mine, some sites provide useless information which are inaccurate and we are advised by our lecturers to not use a few sites like blogs, Wikipedia, etc.'. 2 out of the 3 girls and 1 boy mentioned that they prefer self-studying using the internet as a supplementary tool rather than attending lectures.

Social Oriented Utilization: The common answer for social media platforms used were; Facebook, Instagram, Snapchat, WhatsApp, Viber and LinkedIn. Out of the 6, 4 of them use social media platforms throughout the day (Their data/Wi-Fi is always switched on and they check these platforms on and off when they feel like it). 3 out of the 6 confessed to have broken rest to post pictures to get more 'likes' during peak times. 'Sometimes when I'm

stressed out I like to go through Facebook and look at memes or go on Instagram and check out stories posted by others', this statement was mentioned by a student and 4 others had the same mindset about using social media sites. 4 out of the 6 mentioned that at times they forget they have assignments since they are always engaged on social media platforms and as a result they are unaware of the time spent surfing the internet.

Recreational Oriented Utilization

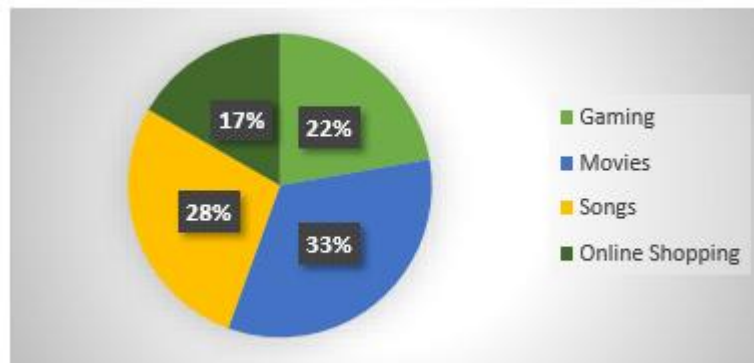


Figure 5: Recreational Use of Internet

As the above pie chart depicts, the higher percentage mainly uses the internet to watch movies and when asked if they use it for any other purposes they mentioned these options; watching cricket and basketball matches online, to research on healthy lifestyles for gym purposes and to check prices of items without purchasing them on sites like WOW.lk, lkman.lk, Daraz, etc. 4 out of the 6 spend over 3 hours for a day either gaming or watching movies and neither of them cut back on the time spent on these activities when exams are close by.

All 6 of the respondents stated that internet does aid in achieving higher grades since it is used for assignment, research and knowledge gathering purposes. However they also mentioned that if the internet is used unnecessarily it will cut back on the time that should be reserved for educational purposes and some might even get addicted to surfing the internet mainly for recreational purposes.

Views on using the internet to increase student engagement,

- The business students mentioned that they should be allowed to bring laptops to classrooms to enable them to research on areas which they are unable to understand since they need not disturb the lecturers during class hours.
- Submit assignments as podcasts/videos, through this students can develop their speaking skills and enhance their creativity as well.
- Gamifying classroom tasks and assignments; by using gaming mechanisms students may want to work harder than they normally would and it would increase their competitiveness as well (Example: Award badges or rewards for completing tasks).
- A student mentioned that 'if infographics are used the presentations would be more appealing to look at and will encourage students to listen more attentively'.

Discussion

When analyzing past literature it was found that there is a statistically significant relationship in between internet usage and academic performance while most of them showed a negative correlation. However; based on the present study it was identified that in the Sri Lankan

context there is a statistically significant impact of internet usage on academic performance of Sri Lankan Undergraduates which is positively correlated.

During the analysis it was witnessed that there is a high internal consistency amidst the data gathered and analyzed. In the sample of 114 undergraduates most of the undergraduates represented the Faculty of Business in the selected Sri Lankan higher educational institute. Based on the descriptive analysis it was observed that most of the Sri Lankan Undergraduates confirms that internet is supportive for them in studying rather than a distraction. However during the in-depth interviews it was also observed that students prefer to have a mixed methodology (mix of both manual and automated form of teaching) of teaching way rather than solely depending on the internet.

Conclusion

The main focus of the present study was to examine the impact of internet usage on the academic performance of the Sri Lankan undergraduates. A comprehensive understanding was obtained and based on the study it was concluded that there is a correlation between the internet usage and the academic performance of Sri Lankan undergraduates. Thus; the present study is not in par with the research findings discussed in the literature review in which it was identified that there is a negative relationship in between the internet usage and the academic performance of undergraduates. However; it is suggested that a similar study to be conducted in the same context using a larger sample size with wider instruments.

The findings of the study revealed that the students who has more interest on ICT has relatively higher GPA than that of those whose interest on ICT is relatively low. Therefore a trend was observed where the embrace of ICT was more of the brighter students. The reason for this must have been because a student to proceed with the ICT usage has to have at least the basic knowledge about the usage of ICT.

The findings of the study further revealed that for the higher educational administration and other relevant parties engaged in the involvement of framing ICT policies for Sri Lankan higher education curriculum; the current study could be used as a point of reference in inculcating the academic curriculum along with the ICT applications to make the learning process more effective and efficient for the students. Also the current study opens up the scope of the researchers who are interested in conducting further studies on the same topic in wider scope in future.

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