

Impact of social media usage on academic performance: Undergraduates in Sri Lanka

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Introduction

ICT, since the last few decades, has grown rapidly revolutionizing the entire globe. Technological advancement and new mediums are being introduced to connect global audiences. Social media as such technological mechanism of connecting people and communities across the globe have become an international trend. Social media are primarily internet based applications and tools to share information between people. Drury (2008) defined social media as "online resources that people use to share content: video, photos, images, text, ideas, insight, humour, opinion, gossip, news". Social media includes popular network websites like Facebook, Twitter, Instagram, WhatsApp, Qzone, Pinterest...etc.

The younger generation is unsurprisingly affluent to use social media. As cited by Gemmill and Peterson (2006), "Social networking sites and Facebook socializing via the Internet has become an increasingly important part of young adult life". As per the statistics of Statista (2017), youngsters especially who are in the age range of 16 – 24 years are heavily using social media. Usually, this denotes their time at high school or university. For many of them, social media is a trendy addiction they eager to adopt. Social media is often used by them to update status, share posts, keep in touch with friends and much more.

Social media usage of generation Z is found to link with their diurnal activities, critical decisions and measures of the performance. For instances, career decision making, matrimonial affairs, learning & development, entertainment, purchasing, and networking...etc (Valentine, 2018). Importantly, this age group apparently make many life-critical decisions such as earning academic /professional qualifications, selecting a job/career/company and/or selecting a partner...etc. The existing literature on this connection offers sufficient support to ascertain the impact of social media on the behaviour of the younger generation specifically in the realm of academic performance (Kolan&Dzandza, 2018). Academic performance is a result of the nexus of factors. As the massive use of social media by the students is concerned, one can rationally question how the use of social media influence the academic performances of them. Such literature appeared to hardly narrow to Sri Lankan context, resulting in a contextual gap in the knowledge

of social media usage. Again, the available scholarly outcomes of this nature limited by their generalizability across Sri Lankan university system.

The present study aimed at assessing the impact of social media usage on undergraduates' academic performances in the context of Sri Lankan state universities. Given the immense usage of social media by the undergraduates, the study alleged to offer the findings critical to steamrolling the use of social media for better academic achievements.

Literature review

Safko and Brake (2009) defined social media as activities, practices, and behaviours among communities of people who gather online to share information, knowledge, and opinions using conversational media. Conventional media are Web-based applications that make possible for one to create and easily transmit content in the form of words, pictures, videos, and audios. A social network represents relationships and flows between people, groups, organizations, animals, computers or other information and knowledge processing entities. Social network in other words is referred to as a social structure made up of individuals or organizations called "nodes", which are connected by one or more specific types of interdependency, such as friendship, kinship, common interest, financial exchange, dislike, sexual relationships or relationships of beliefs, knowledge or prestige." (Asemah and Edegoh, 2012). According to Boyd & Ellison (2008), "Social Networking Sites are web-based services that allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection, view and traverse their lists of connections and those made by others within the system". According to Sensis social media report (2017), around nine in ten users of social media see it as a way of keeping in touch with friends or family. There has been an increase in the use of social media for sharing photos or videos, which has risen to 57%. There was a big jump in the use of social media to play games (up from 18% to 34%), to meet new friends (up from 14% to 30%) and to find or connect with people sharing the same interests (up from 16% to 26%). Another relatively prominent use is to follow celebrities, bloggers or social media personalities, which was mentioned by 28%. Social media like Facebook, Twitter, Instagram, Youtube have attracted millions of internet users. Especially Social media becomes a major part of the youth's daily routine.

Academic excellence or achievement plays an important role in an individual placement, be it in the academic institutions or job placement. The role of academic achievement as one of the predictors of one's life success and also in the aspect of academic placement in schools to higher institutions as well as the level of employability in one's career is inevitable (Kyoshiba, 2009). Academic performance or achievement is the outcome of education, the extent to which a

student, teacher or institution has achieved their educational goals. Academic performance is commonly measured by examinations or continuous assessment but there is no general agreement on how it is best tested or which aspects are most important, procedural knowledge such as skills or declarative knowledge such as facts (Annie, Howard & Mildred, 1996). Given the heavy use of social networks, young students' academic performance is reported to be greatly affected by the use of social media. Social platforms are mainly used by students for socializing activities rather than academic purpose (Oye, 2012). In addition, Oye (2012) stated that the majority of students feel that social platforms have a positive impact on academic growth. Michikyan, Subrahmanyam, & Dennis (2015) conducted research on the Facebook use and academic performance of college students where they found that students with lower GPAs are highly involved in Facebook activities than students with higher GPAs. On the other end, Facebook was reported as useful in maintaining social connections, leading students to spend more time using the site, which contributed to better social adjustment in college (Yang & Brown, 2015). As cited by Yang & Brown, (2015) students engaged in more Facebook interactions with on-campus friends, in turn, facilitated by social adjustment in college and satisfaction with college life (Yang & Brown, 2015). "Social network sites can help to address the relationship development and maintenance needs of young adults at a point in their lives where they are moving away from home and into the university. They face challenges in maintaining former connections while being open to potential friendships with a new set of peers encountered through classes, new living arrangements, and other college activities" (Steinfeld, Ellison, & Lampe, 2008). Moreover, Salvation et al (2014) have found that students prefer the use of Facebook and Twitter for their academic-related discussions over the conventional classroom learning process. As cited by Vijayakiruthik and Maheswaranathan (2016), Adam et al (2014) found a positive impact of the use of social networking sites on the academic performance of students. Enriquez (2010) reported that students who multi-task between social network and homework are likely to have twenty per cent (20%) lower grades than a student who does not have a social network in visual range. He believes that even running a social network in the background of a student's Personal Computer while studying or doing homework could lower a student's grade. A recent study by Kolan and Dzandza (2018) based on Ghana university system revealed that social media addiction is negatively affecting the academic performance of students. Vijayakiruthik and Maheswaranathan (2016) to test the same association in Sri Lankan context and reported a positive impact on social media on academic performance referring to a one state university in Sri Lanka. Several other studies do report the varied results on the impact of social media on academic performance.

The prevailing results in this connection are inconsistent and bound by the ambiguity leading to an associative dilemma. This study is meant to test the impact of social media on the academic performance of undergraduates and to establish the relationship between social media use and academic performance in the context of Sri Lanka state university system. Having considering the existing literature, researchers proposed a framework that illustrates the relationship between social media usage and academic performance here the behaviour of undergraduates 'academic performance was tested against their use of social media (Figure 1).

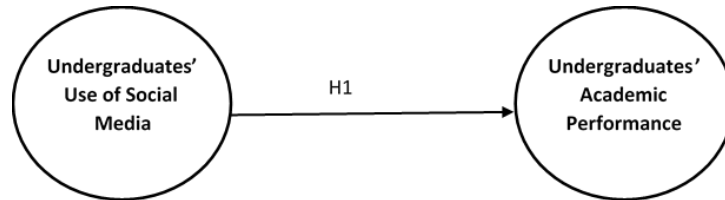


Figure. 1. Research Model

Accordingly, the study assumed that;

$H_1 =$ Use of social media by undergraduates is significantly related to their academic performance.

Methodology

A cross-sectional, relational study was performed in which undergraduates' Academic Performance (AP) was operationalized using Grade Point Average (GPA); the standard measure used to summarize academic achievement (Kolan, & Dzandza, 2018). Use of Social media (SM) was measured by adopting three dimensions namely, the frequency of access (Villanti, et al., 2017), time spent on social media (Alwagait, Shahzad & Alim, 2014), and the type of information shared, view & post (Kolan, & Dzandza, 2018). The reliability scores ranging from 0.718 to 0.866 Cronbach Alpha values for all the variables.

A field survey of undergraduates in Sri Lankan state university system was carried out in gathering the data. Out of the fifteen state universities in Sri Lanka, five (the University of Wayamba, University of Colombo, University of Sri Jayewardenepura, Sabaragamuwa University of Sri Lanka and University of Kelaniya) were selected considering the accessibility of the sample which was drawn from level 3 students of Management faculties of the chosen universities. The researchers tried in controlling the influence of other variables on the academic performance by ensuring the homogeneity of the sample elements. This is achieved by selecting the sample from the third level of management degree programmes. The student population of all universities established under the Universities Act was 29 055 for 2015/2016 academic year (Sri Lanka University Statistics, 2016). A sample of 379 undergraduates was drawn based on the recommendations on

sample size by Krejcie and Morgan (1970). The response ratio was 84% resulting 318 responses. The collected data were analyzed using Pearson's product moments correlation analysis and multiple regression analysis. The interpretation of correlation coefficient was based on De Vaus's (2002) ranking of the correlation coefficients for Social Science researchers: i.e. 1.00= perfect; 0.99 to 0.90= near perfect; 0.89 to 0.80= very strong; 0.79 to 0.70= strong; 0.69 to 0.50= substantial; 0.49 to 0.30= moderate; 0.29 to 0.10= low; 0.09 to 0.00= trivial; while a negative result implies in a reverse correlation.

Results and Discussion

The results of Pearson's product moment correlation shows significant positive relationships between academic performance and social media usage (Table 01).

Table 1. Results of correlation analysis

	Frequency of access	Time spend on social media	Type of information	Academic performance
Pearson correlation coefficient	.381**	.423**	.307**	.481**
Significance value	.001	.000	.010	.000

** Correlation is significant at 0.001 significance level

As per the results of Pearson's correlation analysis, academic performance is related with the social media usage by undergraduates ($r = 0.481$, $p = 0.000 > 0.05$). According to the Vaus's (2002) interpretation of the correlation coefficient, this is a moderate to the substantial positive relationship. Again, the relationship is statistically significant too. Additionally, all the dimensions of social media usage are positively correlated with academic performance; frequency of access ($r = 0.381$, $p = 0.001$), time spend on social media ($r = 0.423$, $p = 0.000$) and type of information shared/posted ($r = 0.307$, $p = 0.000$). All of them are sharing a statistically significant, moderate to a substantial positive relationship with academic performance.

The findings are consistent with the many previous research outcomes in this connection while the same are inconstant with the results of some studies. The positive impact of social media usage and academic performance is supported by the findings of Oye (2012), Michikyan, Subrahmanyam, & Dennis (2015), Salvation et al (2014), Adam et al (2014). Importantly, Vijayakiruthik and Maheswaranathan (2016) who tested the same association in Sri Lankan context found that social media usage has a positive impact on academic performance. In contrast, Yang & Brown (2015) investigated the mixed effect of using Facebook on academic performance; lower GPA and greater social adjustment in college &

satisfaction with college life. Enriquez (2010) reported that students who multi-task between social network and homework are likely to have twenty per cent (20%) lower grades than a student who does not have a social network in visual range. In their recent study, Kolan&Dzandza (2018) revealed that social media addiction is negatively affecting the academic performance of students. The findings of the present study confirm the existing literature those confirm the positive impact of social media usage on academic performance.

Table 2. Results of multiple regression analysis

Variable	β Value	Significance value
Constant	11.072	0.035
Frequency of access	0.307	0.009
Time spend on social media	2.569	0.000
Type of information	0.229	0.002

Table 2 depicts the results of multiple regressions analysis. The dependent variable; academic performance with three predictors achieved a good model fit ($p > 0.05$). The coefficient of determination was 0.378 which implies that 37.8% of the academic performance variability is explained by the social media usage. The regression line could be developed as follows.

$$Y = a + b_1X + b_2X + \dots + b_nX + \epsilon$$

$$\text{Academic Performance} = 11.072 + 0.307 \text{ Frequency of access} + 2.569 \text{ Time spend on social media} + 0.229 \text{ Type of information} + \epsilon$$

This tested regression equation can be used to predict the academic performance provided the use of social media.

Conclusion and Recommendations

The objective of this study was to ascertain how the use of social media influences the academic performance of the undergraduates in the context of Sri Lankan state universities. Resultantly, findings of the study verified that all determinants have an impact on academic performance and they have a moderately positive relationship between social media usage and academic performance.

The theoretical implications of the study hold the empirical evidence of the theorized association between academic performance and social media usage specifically in the context of Sri Lankan state universities. The practical implications indicate that a smart use of social networking results in better academic achievements. Social networks allow making connections with prospective colleges by following them on Twitter, Facebook, Google+ and other platforms. It's a great way to connect with current students, ask questions, and get

an overall feel for current studies. Students can create accounts or online events (like FB groups, Twitter chats and Google Hangouts) for their independent studies. And students can get instant feedback relating to the research with social media. Friends, family, and academic and professional experts can provide insights throughout the process, leading to a better, more refined end product which helps to boost GPA also.

While the present study holds the strengths of data collecting from a representative sample and conformity of the findings with existing literature, it has the problem of limited scope. Further, the observed variable was operationalized using only one dimension; GPA which represents an only quantitative appreciation of academic performance leaving behind the qualitative outcomes such as skill enhancement, personality development, & change of attitudes...etc. Researchers presume these limitations may open the door for further researches relating to the social media usage and academic performance.

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