

EFFECTS OF SOCIAL NETWORK SITES ON TEACHER TRAINEES' GRAMMAR AND SPELLING SKILLS IN GHANAIAN TERTIARY INSTITUTIONS

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Abstract

Against the backdrop of social network sites pluralism, this study was conducted to explore the effects of social network sites on teacher trainees' grammar and spelling skills. The study adopted descriptive design. The simple random sampling technique was used to select 335 respondents from three colleges of education: Bagabaga, St. John Bosco and Tumu to complete sets of questionnaires. Data collection covered respondents' bio data, reasons and rationales of social network sites, benefits of social network sites and effects of social network sites on trainees' grammar and spelling skills. Frequency, percentage, mean, standard deviation and multiple regression were used for data analysis. The findings show that an overwhelmingly majority of teacher trainees use jargons, shorthand, abbreviations and acronyms on WhatsApp, Twitter and Facebook accounts, which affect their grammar and spelling skills resulting in poor performance in English Language test. The study asserts that teacher trainees could do better if they stick to good use of words while communicating on social network sites with their peers.

Keywords: Grammar, Spelling, Social Network Site, Twitter and WhatsApp

Introduction

Teacher trainees' use of social network sites is becoming progressively pronounced in recent times with consequences on their grammar and spelling skills. Relying on use and gratification theory, we aim to critically analyze the reasons and rationales of teacher trainees' use of social network sites. Social network refers to an online community that brings people with common interests, opinions, activities and experiences together by sharing their news, photos, videos and events (Kaplan & Haenlein, 2010). Social network sites can also be defined as 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 and view and traverse their list of connections and those made by others within the system (Junco et al., 2011). The nature and nomenclature of these connections may vary from site to site. The growing popularity of social networks including Facebook, MySpace, Bebo, WhatsApp among others are mainly due to technological advancement such as improved software tools, increased broadband availability and the development of more powerful computers and mobile devices (Raacke & Bonds-Raacke, 2008). Social network sites have become an ubiquitous integral part of the daily lives of millions of people worldwide (Lenhart et al., 2010).

People use social network sites for various reasons. These include: facilitate communication or interaction, to make new friends and to discover new inventions (Cetinkaya & Sütçü, 2016; Owusu-Acheaw & Larson, 2015; Sahu, 2014). Deng and Tavares (2013) state that social network contributes to the development of students' reflective ability and critical thinking skills because they pick the pieces from the internet. Considering that large number of social network site users are teachers and students, it can directly or indirectly impact grammar and spelling skills (Whiting & Williams, 2013).

Several studies (e.g., Mehmood & Tawir, 2013; Ahmed & Qazi, 2011; Kirschner & Karpinki, 2010) have shown that social network sites have contradictory outcomes on users globally. Alwagait et al. (2015) for instance have shown in Saudi Arabia that there is no linear relationship between students' social network use and grade point average. Previous studies have indicated that 57% of students who use social network sites for research perform well in English Language (Mensah & Nizam, 2016).

The growing demand and use of social network sites are gradually competing with teacher trainees' time meant for preps, doing homework, assignment and reading novels (Prince, 2004). According to Williams (2008), the current generation of students are facing different sets of communication via social network sites, which can either help them to faster and multi-task many things at once or lead to a breakdown particularly in grammar and spelling. For example, Obi et al. (2012) observe that the use of social network sites affects students' ability to correctly construct simple sentences with proper forms of punctuations. Many students are getting familiar with the use of shorthand writing in their final examinations resulting in weak performance (ibid). The Ghanaian Chronicle Newspaper indicates that social network sites have led to students performing poorly in English language proficiency in the West African Examination Council due to the rampant use of abbreviated words (Garcia, Annan Singh, & Elbeltagi, 2011). In addition, the Institute of Education, University of Cape Coast reports that most teacher trainees in the Colleges of Education in Ghana could not construct complete sentences without adopting forms of abbreviation or shorthand normally used in social media in their End-of-Semester English Language Examinations. The report indicates that most words were poorly spelt and sentences poorly ellipsed leading to ambiguity and lack of comprehension. The use of non-standard form of abbreviations and shorthand negatively affect all aspects of students' language especially spelling and sentences construction (syntax). Against this background, the following research questions are asked: *What are the reasons and rationales of using social network sites? Which are the benefits of using social network sites? What are the implications*

of social network sites on teacher trainees' grammar and spelling skills? The overarching objective of this study was to assess the reasons and rationale for using social network sites and the implications of social network sites on teacher trainees' grammar and spelling skills.

Methodology

The study adopted a descriptive survey design because it enabled the generation of adequate data at a time (Yin, 2018). Using a simple random sampling technique, one college of education each was selected from the Northern, Upper East and Upper West regions. The selected Colleges of Education were Bagabaga College of Education from Northern region, St. John Bosco College of Education from Upper East Region and Tumu College of Education from the Upper West region. The total first year teacher trainee population in the selected Colleges of Education was 2620.

Adopting Krejcie and Morgan (1970) sample size determination formular, this study selected 335 teacher trainees. Based on the proportional sampling technique, 150 teacher trainees were drawn from Bagabaga College of Education, 115 from St. John Bosco and 70 from Tumu Colleges of Education. The list of teacher trainees was obtained from the Registrar of the respective Colleges. The names of teacher trainees were written on pieces of paper, rolled, put in a container and mixed thoroughly to avoid bias in the selection of respondents. A child was blind folded to pick the pieces of paper from the box one by one without seeing through the pool. This activity was replicated in all selected Colleges.

Structured questionnaire was used and this was divided into four parts. The first part elicited the bio data of the respondents including gender, age, study programme, use and access to smart phones, tablet, laptop, computers, etc. The second part collected data on reasons and rationale of social network sites. The third part concentrated on the benefits of social network sites to teacher trainees. The last section was dedicated to the challenges of using social network sites. Mean, standard deviation and multiple regression tests were performed. The Durbin-Watson (DW) statistic was used to test for first-order serial correlation. The DW statistic also measures the linear association between adjacent residuals from a regression model. In this paper, the DW is a test of the hypothesis, $p = 0$. If there is no serial correlation, the DW statistic will be around 2. The DW statistic will fall below 2 if there is positive serial correlation (and in the worst case, it will be near zero). If there is negative correlation, the statistic will lie somewhere between 2 and 4.

Results

Table 1: Bio-data characteristics of respondents

Variable	Frequency	Percent
Gender:		
Male	194	57.9
Female	141	42.1
Programme:		
Science	62	18.5
Technical	76	22.7
French	28	8.4
General	169	50.4
Language used on social media:		
Formal	94	28.1
Informal	241	71.9

Social media tools:		
Mobile phones	279	83.3
Desktop	51	15.2
Laptop	5	1.5

The findings as shown in Table 1 indicate that 194 (57.9%) of the respondents were male trainees and the rest 141 (42.1%) were females suggesting that there is gender disparity at the tertiary level (Khan & Sumitha, 2011). The average age of male respondent was 25 years and female respondent was 21 years. The finding suggests that there are younger female trainees at the tertiary level compared to male trainees, which means that the likelihood of female trainees staying much longer in the teaching profession is high. The results from the Table 1 again indicate that 51 (15.2%) of teacher trainees use desktop computers 5(1.5%) use laptop and 279(83.3%) use mobile phones to use and access social network sites. Like this study, Adam and Al-hassan (2015) indicate that most teachers in Ghanaian basic schools use smart phones to use and access social networks sites to research, learn and communicate with their peers. Furthermore, 241(71.9%) of teacher trainees indicate using informal language – jargons, shorthand, abbreviation and acronyms in their communication with their peers and instructors.

Reasons and rationales of using social network sites

Table 2: Means of social network sites used by teacher trainees

Types	Mean	Standard deviation
Blogs	0.1	0.210
Delicious	1.4	1.221
Flicker	2.5	1.026
Google+	1.6	1.104
Imo	7.2	2.421
Instagram	5.3	1.920
LinkedIn	0.4	1.233
Myspace	2.4	1.735
Skype	2.3	0.038
SlideShare	1.1	0.992
Snapchat	9.0	3.329
Twitter	7.4	3.119
WhatsApp	23.8	2.471
Wikis	1.2	0.061
Yahoo Messenger	4.2	2.183
YouTube	12.1	4.288
Facebook	18.3	2.400

The results as shown in Table 2 indicate that the teacher trainees use social network sites for fastness, easiness and convince. Indeed, in the 21st Century, communication and information sharing have become faster and easier justifying the need for investment in the sub-sector. Consequently, many teacher trainees use WhatsApp and Facebook sites for a variety of reasons including for checking

on-campus and off-campus information, political and civic issues, to facilitate social interaction with their peers, to constantly keep in touch with friends and classmates, access government information on covid-19, listen to jokes, play games, read funny and humorous comments. These findings agree with Church and Oliveira (2013), Papoola (2014) Hargittai (2008), Park et al. (2009), Pempek et al. (2009), Santos et al. (2009) and Whiting and Williams (2013). Whiting and Williams (2013), for example indicate that over 800 million and 300 million users on Facebook and Twitter share information, music and photograph.

The study findings show that Blogs and LinkedIn are important educative and information sharing sites to leverage or complement formal educational activities and enhance learning outcomes (Ndaku, 2013), yet they are the least used social network sites among teacher trainees because they appear to be more academic than for socializing and fun making.

Benefits of using social network sites

Table 3: Benefits of using social network sites

Social media	Mean	Standard deviation
Promote and quicken communication among peers	15.8	3.2
Research and learning activities	04.3	1.0
Upload and download literature, video, music, pictures, etc.	14.4	2.7
Searching for holiday job advertisement	01.1	0.2
Develop reading and writing skills	01.4	0.6

Data from Table 3 show that one of the cardinal benefits of social network sites is their ability to promote and quicken communication (mean = 15.8; standard deviation = 3.2). Unlike in the past where people used to travel long distances and sometimes send messages through people to a receiver, which often got distorted, the recent proliferation of social network sites has not only drastically reduced traveling time for most people but also eliminates information distortion between the sender and receiver of the information. As a result of their benefits, some tutors have resorted to the use of Facebook, MySpace and Twitter for example to send information and assignments to teacher trainees (Khan & Sumitha, 2011).

The results further indicate that social network sites help teacher trainees to upload and/or download literature, videos, music and pictures (mean = 4.3; standard deviation = 1.0). People can view the files uploaded by others in Flickr, iTunes, Shutterfly and YouTube. Whereas many teacher trainees often download videos and music for entertainment, others upload their pictures to court new friends. As schools were closed down in the peak of covid-19 and the associated social distancing protocol of covid-19, teacher trainees socialized with their peers via social network sites to ease boredom and other forms of unproductive activities. These sites enable viewers to enrich them with tags and share their comments.

Another benefit of social network sites to teacher trainees is that they enable them to search and view holiday job opportunities. During long vacations, teacher trainees search for holiday jobs at the Electoral Commission of Ghana, the Ministry of Food and Agriculture and the Ghana Statistical Service as data entry clerks. This finding confirms Adam and Al-hassan's (2015) observation in Northern, Upper East, Upper West and Volta regions of Ghana that teachers use social network sites to find holiday jobs at government agencies and departments.

Frequency of use of social network sites

Table 4: Frequency of use of social network sites

Types	Less than 1 hour (%)	Between 1 and 3 hours (%)	Between 4 and 6 hours (%)	More than 6 hours (%)
Blogs	99	1	0	0
Delicious	100	0	0	0
Flicker	100	0	0	0
Google+	100	0	0	0
Imo	100	0	0	0
Instagram	93	7	0	0
LinkedIn	100	0	0	0
Myspace	100	0	0	0
Skype	100	0	0	0
SlideShare	100	0	0	0
Snapchat	100	0	0	0
Twitter	68	32	0	0
WhatsApp	2	4	78	16
Wikis	100	0	0	0
Yahoo Messenger	99	1	0	0
YouTube	6	82	12	0
Facebook	13	17	65	5

Data from Table 4 indicate that all respondents spend less than one hour on Delicious, Flicker, Google+, Imo, LinkedIn, Myspace, Skype, SlideShare, Snapchat and Wikis. Most of the respondents, 78% spend between 4 and 6 hours on WhatsApp and 65% of the respondents spend between 4 and 6 years on Facebook. The long hours spend on WhatsApp and Facebook by teacher trainees have negative implications on their health and studies. This finding concurs with several authors such as Madhusudhan (2012), Quan-Haase and Young (2010), Sahu (2014) and Sheldon (2008). According to Madhusudhan (2012), 90% of faculty members of Indraprastha University in Delhi, India who stay longer on Facebook experience stress.

Challenges of using social network sites

Table 5: Challenges of using social network sites

Challenges	Frequency	Percent
Weak internet service	133	88.7
Lack of privacy and security	97	64.6
High cost of internet bundle	109	72.6
Impersonation and scamming	63	42.0

Table 5 show that the 133 (88.7%) of teacher trainees ranked weak internet service as the most serious challenge in the use of social network sites. The frustration that trainees encounter with their attempts to upload or download video, music and literature due to weak internet service affects their ability to concentrate during lesson delivery. Also, the findings show that 109 (72.6%) of teacher trainees indicate high cost of internet bundle as a challenge in the use of social network sites. Teacher trainees in Ghana earn less than US\$80 per month, which is insufficient for them to buy adequate

data bundle. Related to the cost of data bundle, is low internet speed for downloading or uploading files, music, pictures and videos. Unlike in the developed countries where there is high internet speed, developing countries including Ghana face monumental low internet speed due to government's low investment in telecommunication infrastructure.

Furthermore, 97 (64.5%) of teacher trainees indicate lack of privacy and security while 63 (42%) indicated impersonation as challenges of using social network sites. Previous studies show that users of social network sites are vulnerable to intruders and hackers (Khan & Sumitha, 2011; Madhusudhan, 2012). According to Khan and Sumitha (2011) some social network site users sometimes use psuedonyms and impersonation of photos of prominent personalities across the globe on their profile to scam and dupe unsuspecting people of their hard earned wealth (Salvation & Adzharuddin, 2014).

Effects of social network sites on grammar and spelling skills

Table 6: Social network sites influencing academic performance

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	0.640785	0.216881	2.954541	0.0036
Blogs	0.030920	0.085827	0.360261	0.7191
Delicious	0.005828	0.084414	0.069039	0.9450
Flicker	0.056068	0.084185	0.666012	0.5064
Google+	0.047295	0.083625	0.565557	0.5725
Imo	0.029007	0.091095	0.318426	0.7506
Instagram	0.125674	0.076566	1.641377	0.1027
LinkedIn	-0.011559	0.016061	-0.719664	0.4728
Myspace	-0.204167	0.197719	-1.032610	0.3034
Skype	0.328084	0.328715	0.998082	0.3198
SlideShare	-0.273270	0.331578	-0.824149	0.4111
Snapchat	0.201223	0.083911	2.398055	0.0176
Twitter	-0.653700	0.076537	-8.540992	0.0000
WhatsApp	-0.801444	0.323961	2.473891	0.0144
Wikis	-0.000585	0.330104	-0.001773	0.9986
Yahoo Messenger	0.641108	0.189522	3.382768	0.0009
YouTube	0.479076	0.085495	5.603531	0.0000
Facebook	-0.238566	0.091668	-2.602510	0.0101
R-squared	0.928968	Mean dependent var	5.276583	
Adjusted R-squared	0.920926	S.D dependent var	0.517541	
S.E. of regression	0.145533	Akaike info criterion	-0.916225	
Sum squared resid.	3.367593	Schwarz criterion	-0.576597	
Log likelihood	100.5440	Hannan-Quinn criterion	-0.778497	
F. statistics	115.5231	Durbin-Watson statistics	2.011837	
Prob.	0.000000			

Results from the multiple regression analysis in Table 6, indicate that social network sites have impacts on teacher trainees' grammar and spelling skills. The R-square of the model is 0.928, which means that 93% of the variance in grammar and spelling skills is explained by social network sites use. The remaining 7% shows that other factors including family background, availability of teaching and learning materials, and tutor commitment to teaching affect grammar and spelling skills of teacher trainees. The coefficient of the independent variables indicates that a unit change in WhatsApp, Twitter and Facebook will result in grammar and spelling skills change by 80%, 65% and 24%, respectively.

Since the DW lies between 2 and 4, the findings suggests that there is a negative correlation between social network sites and grammar and spelling skills. This means that an increase use of abbreviations, acronyms, jargons and shorthand writing on WhatsApp, Twitter, and Facebook will result to poor grammar and spelling skills. According to tutors of English, the use of abbreviations and jargons in social network sites manipulate trainees' linguistic habits. Teacher trainees often intentionally translate these abbreviations and acronyms in examination scripts and thus, contribute to poor performance in English Language (Rambe & Bere, 2013).

Table 7: Abbreviations used by teacher trainees in examination scripts

Abbreviation	Meaning	Abbreviation	Meaning
Kk	Okay	Yh	Yeah
B'cos	because	Yr	Year
U	You	Dey	They
Dat	That	Idk	I don't know
Gud	Good	Wana greet u	I want to greet you
Gr8t	Great	4	For
4rm	From	2	To
Na	No	Gm	good morning
TG	thank God	Tanx/10x	thanks

Discussion

In the 21st Century, communication and information exchange has been made relatively easy and fast for people across the globe. According to Katz et al.'s (1974) use and gratification theory, people choose social network sites to meet their specific needs including interaction, strengthening interpersonal relationship, building a sense of belonging and collective identity, civic engagement and political participation, entertainment and research activities. Social network sites can also facilitate learning and skill development outside formal learning environment by supporting peer-to-peer learning of knowledge and skills, collaboration, diverse cultural expression, and a more empowered conception of citizenship (Wood et al., 2014).

Simultaneously, users' grammar and spelling skills are dwindling due to the constant use of shorthand, jargons, abbreviation and acronyms in social network sites (Brandtzæg & Heim, 2009). The rampant use of coded writing on social network sites to speed up typing and reduce waste in internet data bundle has unintended consequences on users' English Language competence and particularly in their final examination scripts (Helou & Abdul Rahim, 2014). Apart from written communication, the use of unknown abbreviations also affects spoken communication because users tend to pronounce words the way they are spelt.

Conclusion and Recommendation

Despite the negative effects of social network sites, this study showed that there are several benefits of social network sites to teacher trainees. The many platforms improve information exchange between users. The study also establishes that social network sites are effective ways to promote teacher trainees' engagement in order to reduce boredom. Considering the benefits of social network sites to teacher trainees, we are of the opinion that teacher trainees could do better if they stick to standard spelling of words and sentence construction while communicating on social network sites. We strongly recommend that teacher trainees use social network sites to enhance their grammar and spelling skills and avoid unknown and unacceptable abbreviations, acronyms and jargons.



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