KIU Interdisciplinary Journal of Humanities and Social Sciences

THE MORPHOLOGY AND EFFECT OF SMS/SOCIAL MEDIA HABITUATION ON THE SPELLING PATTERNS OF SOME SECONDARY STUDENTS IN DELTA STATE, NIGERIA

Emmanuel Ogheneakpobor Emama[1]

[1]Delta State University, Abraka, Nigeria

*Corresponding Email: emmanuel@delsu.edu.ng

Citation: Emama, O.E. (2023). The Morphology and Effect of SMS/Social Media Habituation on the Spelling Patterns of some Secondary Students in Delta State, Nigeria. *KIU Interdisciplinary Journal of Humanities and Social Sciences, 4*(1), 127-138

ABSTRACT

The influence of technology and the internet on modern English language is indisputable. Social media apps have become the most enduring sources of spelling innovations in English. With insights from morphology, this paper utilises a descriptive approach to investigate the effect of habituation, measured in terms of the frequency of use of chat platforms, on the spelling behaviour of one hundred and sixty senior secondary students in rural and cosmopolitan communities. Data is generated from one hundred sixty senior secondary school students with questionnaires and written compositions. The findings indicate that habitual users of SMS/social media chat platforms unconsciously transfer spelling patterns characteristic of social media messaging applications into formal written English. The data also indicate that the phenomenon mainly operates on monosyllabic words vis disyllabic and polysyllabic categories. The paper recommends less prescriptivism of the phenomenon and an understanding of the process as a phase in the evolution of the English language.

Keywords: social media, SMS language, formal English, education, habituation

INTRODUCTION

The globalization of English owes much to technology. The expanding functional domains of English in cosmopolitan and rural and rural communities owe a lot to technologically driven developments (Emama, 2017). Historically, the expansion of the utility value of English has always coincided with some epochal technological development. In the Middle English period, for instance, printing technology significantly influenced the language in terms of standardization, popular education, and the spread of the standard form of the language within the British Isles. Before the emergence of ICT as the primary driver of the globalization of English, the colonization of large swathes of Africa and Asia was, unarguably, the most significant event that propelled the internationalization of the language (Britannica, 2020). Colonization was only possible with the deployment of tech-driven innovations that gave the English an

overarching advantage in Europe, making its expansive colonial ambitions virtually unchallenged by other European powers.

The unhindered march of British colonization, beginning in the seventeenth century, was driven not by any inherent demographic advantage over competing European powers such as France, Germany, Spain, Portugal, and Belgium but by technological advantages. In this regard, superior shipping and armaments were especially significant. In the course of the evolution of the language beginning from the 17th century, some of the coercive forces that established English in Europe, internationalized the language, and made colonialism possible began to be replaced by more benign and less sanguinary tech-driven innovations. Today, the global attraction of English is no longer hinged on coercive colonial policies, racial subjugation, or English gunboat diplomacy in Africa and Asia. Its appeal rests on utilitarian value as a language of interethnic communication, use in education, the depth of its scientific knowledge base, domination of the entertainment industry, and entrenchment in disparate sociocultural contexts (Chambers, 2000; Emama, 2017). The scale of its entrenchment in western and non-western milieu is evidenced by the variety of descriptive terms used to capture English's global role.

The invention of the internet, the affordability of internet-enabled devices, and cheap access to internet connectivity have affected the language in many ways. These factors have largely obviated the influence of the traditional regulators of the language. The power of print media, television, and radio programme editors who formerly controlled access to written and spoken materials to the public is significantly reduced. Consequently, the educated user of any diatopic variety of the language has greater potential to influence the lexico-semantics of the language and disperse the same within and beyond the geographical confines of that variety. Second, the internet has revolutionized e-communication significantly, especially in electronic messages (email and social media messages).

Arising from the preceding e-mediated short messaging platforms have become the world's most popular methods of written communication. A sample of the data on the number of users of social media applications around the world is an indicator of its pervasiveness. Commenting on its popularity in the United States of America in 2021, Auxier and Anderson (2021) assert that seven in ten Americans use a variety of social media platforms for messaging and other forms of socialization. Significantly, they maintain that the figure has remained constant in the past five years. With a population of three hundred and thirty-six million, nine hundred and ninety-seven thousand, six

hundred and twenty-four in 2021, the data indicates 235 898. Three hundred thirty-seven people actively use social medial applications in the USA. The European data indicate that the use of social media among those thirty and under is staggering. With a population of 748,852,533 million (World Bank, 2021), figures show that Facebook (457 million), Instagram (281 million), TikTok (227 million), and Twitter (9.2 million) are the leading social media platforms (Dixon, 2023).

In the Nigerian context, the most recent data on the figures and demographics of social media usage is estimated at 36 million. In descending order, WhatsApp (91.1%), Facebook (86.4%), Instagram (77.9%), Facebook Messenger (71.2%), Twitter (57.4%), Telegram (50.3%), and Snapchat (49.7%) (Sasu, 2022, p. 2). At roughly 17% of the population, Nigerian data, relative to the country's population of 213.4 million (2021), is comparatively tiny vis the American and European data. However, it is significant in the context of the nascency of the introduction of commercial internet services into the country. Apart from its function in e-messaging and socialization, the increasing popularity of social media messaging services is driven by the convenience and services it offers in a frenetic, globalized world. These services are also indispensable to other aspects of a globalized economy. For instance, they are an integral component of automated systems necessary for online purchases on e-commerce platforms. Advertisers and service providers also use direct text marketing to send text messages to mobile phone users about promotions, payment due dates and other notifications. These have primarily made mail by post almost moribund. However, most interactions on these platforms are essential to enhance socialization between individuals.

The unique spelling patterns that have become a defining feature of social media messaging applications were initially an invention of necessity. Limitations on word count per message characterized the introduction of GSM telephony in the early 2000s. Arising from the preceding, abbreviations and acronyms became increasingly popular to optimize the communicative value of text messages because of the word count limitations imposed on text messages for mercenary reasons (Harris, 2010: p. 108-110; Battestini, n.a: p. 9). This feature, word limitation, is especially true of first-generation short messaging services. Over time, the evolution of ICT from first to fourth generation has made word count limitation almost moribund (Arif et al., 2019: p 1). Despite these changes, the use of abbreviations and acronyms has persisted and increased as the need to compress the communicative load has remained constant in a frenetic and globalized world. It is pertinent to observe that social media platforms are responsible for the evolution of increasingly complex patterns of lexical compression compared to the traditional short messaging service (hereafter abbreviated as SMS).

Literature Review

Language constantly evolves. Major language changes have always coincided with significant developments in political, cultural, and scientific developments within and outside the geographical space where a particular language is used (Emama, 2017: p 43: Al-Sharqi1 & Abbasi, 2020: p 1-3). Consequently, the evolution of English, from old to modern English, is significantly impacted by wars, religion, the renaissance, trade, and technology (Crystal, 2000). In the beginning, the most significant impact of these factors had their greatest effect on the lexicon as English's syntactic structure was primarily established during the Middle English period. Comparatively, the linguistic changes exerted on English by all the non-tech factors are almost insignificant compared to those underpinned by technology. Before the emergence of technology, English was restricted to a tiny corner of what eventually became Europe.

When the telephone was invented more than a century ago, it was functionally one-dimensional, only useful for verbal communication. It needed to include the plethora of features the contemporary smartphone user takes for granted in modern ICT-underpinned communication: emojis, video calls, conference calls, and multimedia conferences. However, technology is also responsible for far-reaching changes in the way interpersonal, group interaction, and written interactions are carried out on numerous internet-enabled ICT devices. These changes have radically altered language use at the level of structure and lexis. English, like other languages, has a very complex system of rules. These rules involve adherence to a specific pattern of phonologically distinctive constraints, semantics, and syntax germane to effective communication. Arising from the influence of SMS and other social media applications on the written English of its educated users, studies have examined the linguistic features of internet-mediated communication and how they affect proper usage (Baron, 2003). The effect of tech-driven influences on language structure has continued to generate scholarly debate, especially in the twenty-first century. More than ever, deploying innovative ICT technology has resulted in an unprecedented synergy between language and technology (Oluya & Babalola, 2013). Unsurprisingly, questions of the desirability and inevitability of these influences have generated scholarly debates among scholars and researchers. Most of these concerns centre on the effects of e-mediated chat applications and SMS on orthography, language change, standardisation, and implications on English language pedagogy.

The specific influences that e-mediated SMS exerts on language have been of interest to language scholars and researchers. These influences have been investigated from the

perspective of style, technology, and pedagogy (Noytim, 2006; Baron, 2003; Walther, 2013). Others have investigated the phenomenon from the psychological angle of habituation (Osharive, 2015). For instance, Subair et al. (2019: p 55-56) asserts that 'despite the benefits of social media on student learning and achievement concerning knowledge sharing', social media usage is associated with internet addiction, cyberbullying, anti-social behavior, distraction, and writing and spelling skill deficiency. The consensus is that there is a causal connection between the increasing popularity of social media platforms and the prevalence of their unique spelling forms in students' written compositions in Standard English (Osharive, 2015: p 45-46). The intrusion of SMS spelling patterns into aspects of formal language use has elicited many reactions from language scholars and teachers. Some are negatively critical of the influence of online messaging platforms, while others see such changes as inevitable and a positive development. For instance, Oluga and Babalola (2013) and Alibi (2005) observe that regular use of chat platforms harms the spelling of many students and non-students. They point out that infiltrating spelling patterns characteristic of these services into proper usages is particularly worrying. Others disagree. Crystal (2008) notes that the use of abbreviations and acronyms is a phenomenon that has been around for years since it has been in practice for years prior to the upsurge in ICT-enabled messaging platforms. Second, he avers that the formal rules that govern language use are acquired/learnt before the language user becomes familiar with the peculiarities of SMS spelling. The entrenchment of formal language rules should serve as checks on the intrusion and transfer of text language feature into formal written English. He concludes by stating that text messaging also has a salutary effect on literacy as it allows language users to engage in language-improving activities.

For several reasons, the expectation is that the popularity of e-mediated short messaging and social platforms is set to increase astronomically in the coming years. First, new discoveries in the technologies that underpin e-communication are being made at an astronomical pace. For instance, remarkable progress has been made in actionable sixth-generation internet connectivity even while the fifth-generation connectivity platform is being established globally. Second, the increasing reliance on such services in a globalized world and the relative ease of accessing them all point to the entrenchment of their utility value. Consequently, scholarly interest in the influence of the internet on language in terms of communication, use, and structure is expected to increase. Consequently, this study investigates the relationship between the habitual use of SMS and social medial applications and its influence on the spelling patterns in the written compositions of selected secondary school students. In addition, the paper investigates striking morphological influences that underpin SMS spelling.

METHODOLOGY

The study adopts the descriptive method. The choice of the descriptive method was primarily determined by the quantifiable data, which are amenable to statistical analysis to derive conclusions that are generalizable beyond the study population. Insights from English morphological processes are also used to analyze the morphological characteristics of the data.

Study Population

One hundred and sixty senior secondary students are chosen for this study. The participants are chosen from four schools: two from the metropolitan part of Udu Local Government Area and the other two from rural communities in Ethiope East Local government area. This division is critical to establishing the influence of habituation as it affects lexical choices in their written compositions. The metropolitan respondents attend an expensive private school. They are the children and wards of the middle class and the rich. The principal data-gathering instruments are questionnaires, and the written compositions of one hundred and sixty secondary students provide the data for the study. More than 93% of them own or have access to internet-enabled devices and frequently use several social media applications. This group is expected to satisfy the habituation condition. Habituation in this context is defined as the psychological dependence on social media chat applications. The expectation is that higher habituation indices should translate into higher interference features of SMS lexical patterns in their formal compositions in standard Nigerian English. The data derived from students in the rural school in Ethiope East functions as the control group. A defining feature of their location is that there is no internet connectivity in the study area. Consequently, social media platforms need to be more present.

Method of Data Analysis

The study adopts simple percentage statistics for data analysis. To test the levels of habituation, defined in terms of addiction to/frequency of use of social media chat applications, the responses derived from the questionnaire-based test items are counted and calculated using a simple percentage. Lexical patterns of SMS abbreviations and acronyms Data derived from the written compositions of the respondents provide the second primary data. The frequency of occurrence of these forms are counted and statistically computed to determine the percentage of intrusion vis a vis formally appropriate lexical patterns.

Research Questions

Two research questions guide the study. These are:

1. Is there any correlation between the habitual use of SMS abbreviations and acronyms and the intrusion of such forms in the written compositions of secondary students?
2. What are the peculiar morphological features of SMS spellings?

DATA ANALYSIS AND DISCUSSION

In this section, we present the data analysis and discussion of the findings in line with the research questions earlier stated.

Research question 1

Is there any correlation between the habitual use of SMS abbreviations and acronyms and the intrusion of such forms in the written compositions of secondary students?

As indicated in Tables 1 and 2 below, the data analysis clearly shows a causal relationship between the habitual use of SMS/social media chat applications and the prevalence/intrusion of the SMS spelling patterns in the compositions of the study population in their written compositions. The statistical analysis of the control and metropolitan study populations established (see Tables 1 and 2) that the highly habituated metropolitan population exhibited a significant level of social media-inspired abbreviations in their written composition compared to the data from the rural population. Details of the statistical analyses provided in Tables one and two show a correlation between levels of habituation and the extent of interference of SMS language in the composition of the study population.

For instance, 88% of the respondents from the cosmopolitan study population admit that they frequently use several social media applications for socialisation and sending short messages. The data is, therefore, indicative of a high level of habituation.

Table one: Correlation between Frequency of Use and interference. (Metropolitan Data)

Respondents and Frequency of Use			**Scripts/wordcount/ percentages**			
Number of respondents	Frequency of social media use		No. of scripts	No. of words	Instances of SMS Forms	Percentage of SMS Forms
	Daily	Irregular	95	11, 450	978	9%
95						
	89	11				
percentage	88%	12%			Percentage	

Out of eleven thousand four hundred and fifty words in ninety-five compositions, nine hundred and seventy-eighth of the words are abbreviated forms used on messaging applications. These forms constitute 9% of the lexical items used in the written compositions. The preceding contrasts with the rural data presented in table 2 below.

Table two: **Correlation between Frequency of Use and interference. (Rural Data)**

Respondents and Frequency of Use				**Scripts/wordcount/ percentages**			
Number of respondents		Frequency of social media use		Number of scripts	Number of words	Instances of SMS Forms	Percentage of SMS Forms
		Regular	Irregular	65		12	0.1%
65		6	59		7,221		
Percentage		9%	91%				

Data from the rural study population indicates that only nine 9% of the respondents use text messages, the most basic form of e-communication. Significantly, text messaging requires minimal telephony and is incapable of video calls, emojis, and social media applications such as Instagram, WhatsApp, and Facebook messenger. In the rural data, the use of spelling forms characteristic of social media messaging is negligible. Only twelve instances of such forms are found in seven thousand two hundred and twenty-one lexical items. The figure constitutes 0.1% of the total word count.

Research Question 2

What are the peculiar morphological features of SMS and Social Media Applications' spellings?

Immediately, two significant morphological characteristics are evident in the data. First, is that most of the abbreviated lexical items are monosyllabic. Fifteen of the twenty lexical items that account for nine hundred and ninety SMS forms found in the data are

monosyllabic words. Examples are numbers one to thirteen (table 3) and one, two, and five in table 4.

Table 3: SMS Abbreviations

SN	Standard Form	SMS Form	Morphological process
1	Why	Y	Phonic representation
2	You	U	Phonic representation
3	The	D	Phonic representation
4	Should	Shld	Vowel deletion
5	Would	Wld	Vowel deletion
6	Please	Plz/pls	Vowel deletion
7	And	Nd	Vowel deletion
8	Hour	Hr	Vowel deletion
9	Your	Ur	Vowel deletion
10	Week	Wk	Vowel deletion
11	Year	Yr	Vowel deletion
12	Okay	Ok	Vowel deletion
13	Could	Cld	Vowel deletion

The predominance of monosyllabic words in the data may not be unconnected with the observation that the simplicity of their morphological forms expedites the facility of conversion to SMS/social media forms in the compositions. Polysyllabic words are much more complex, require greater mental effort to process, and seem to trigger entrenched structural rules of formality. In the data, only two polysyllabic words occur (serial number four and). The second factor is that four morphological processes account for patterns of SMS spelling in the data, as presented in Tables three and four. These are explained below.

Vowel Deletion

This process involves deleting all or some of the vowels in lexical items. The affected lexical items are either one-word lexical items or compounds. This process manifests in three ways and may involve a combination of the two processes. In compounds, there are two variants of the morphological process. In the first, the vocalic deletion usually affects only the first lexical item. Only the initial consonant in the first lexical item is retained, while the vowel(s) and any other consonants are removed. The initial consonant is merged with the second lexical item. The second lexical item is unchanged.

Table 4: SMS Abbreviations

SN	Standard Form	SMS Form	Morphological process
1	And	&	Symbol representation
2	At	@	Symbol representation
3	Forgive	4give	Alphanumeric abbreviation
4	Someone	Some1	Alphanumeric abbreviation
5	Night	Nite	form simplification
6	Telephone	Fone	Vowel/consonant deletion
7	Tomorrow	Tmoro/2moro	Vowel deletion

Phonic Representation

In this case, letters replace words based on the phonic similarity between the words and the alphabet. SerialsIn the rural data, these types predominate and account for eleven of the twelve instances of SMS abbreviations found in that subset. Serials number one, two, and three are good examples.

Alphanumeric Abbreviation

This process involves replacing words with numbers or a mixture of numbers and alphabets. Like phonic representation, the numeric components used in alphanumeric abbreviations phonetically approximate the syllabic boundaries of the phonemes represented by the numeric component in this process.

Use of Symbols

Although fewer in number, computer symbols are also used in SMS and social media communication. The @ (at) and the ampersand symbol (&) are two famous examples. The @ symbol was created for use in the world wide web to specify, among other functions, the email service provider to which an electronic mail is to be sent. It also performs an analogous function in SMS text messages and social media chats by specifying a location (cf. @Lagos) or a specific individual in the group chat room (cf. @prof. Mowarin). In the latter, the @ symbol has two distinct functions in a group chat room; to indicate that a particular comment, rebuttal, or observation is directed at a specific individual or to request that a specific individual should react to a specific question.

CONCLUSION

Controversies have been a hallmark of the evolution of English, especially as technology began to play an increasingly influential role in its development. The debate on the intrusion of social media-inspired spelling forms into formal English will continue into the foreseeable future as technological innovations continue to influence spelling patterns that inevitably seep into standard text. It is naïve to expect the formal components of the language to remain immune from the intrusions of internet-driven technology in the face of its role in global communication, e-socialisation, and education. The expectation is that the internet, and the changes it continues to facilitate, will continue to refine and define communication. Therefore, a continuous change in how English will be used in the future is inevitable. No amount of protestation can stop it. Language structure, especially at the level of lexis, will have to make some compromises to the will of technology.

REFERENCES

Arif et al. (2019). The Effect of Social Media on the Sustainability of Short Message Service (SMS) and Phone Calls. *Procedia Computer Science* 161 687–695

Baron, N. S (2000), alphabet to Email: How Written English Evolved and where it's Heading. London, Routledge.

Baron, N. S. (2003). Language of the Internet. Stanford Handbook for Language Engineers, Ali Farghali (ed) pp 1–63. Stanford: CSLI Publications.

Battestini, A. et al. (n.a) Large Scale Study of Text Messaging Use, Research Center 955 Page Mill Road Palo Alto, CA 94304 USA

Carter, R. (2004). Language and Creativity: The Art of Common Talk, USA and Canada: Routledge.

Chambers, J. K. (2000). world enough and time: Global enclaves of the near future. *American Speech.* 7 (5) 25–45.

Crystal, D. (2006). *Language and the Internet.* Cambridge: Cambridge University Press

Crystal, D. (2008). *Texting.* London: Oxford University Press.

Emama, E.O. (2017). The utility value of Urhobo, English, and Pidgin in selected Rural Urhobo Communities. Abraka Humanities Review 7 (1) 42-50

Harris, I. (2010). The Evolution of SMS Features and Specifications from the Beginning of 1997 to Mid-2009 in Friedhelm Hillebrand (Editor) Short Message Service (Sms) The Creation of Personal Global Text Messaging/ Wiley

Kamran, S. (2010). Mobile Phone: Calling and Texting Patterns of College Students in Pakistan, International Journal of Business Management, 5 (4), 26-36.

Ling, R. (2008). New Tech, Ties: How Mobile Communication Is Reshaping Social Cohesion. London: MIT Press.

Noytim, U. (2006). *The Impact of the Internet on English Language Teaching. A case study at a Thai Rajabhat University.* An unpublished PhD thesis, Thai Rajabhat University

Osharive, P. (2015). Social Media and Academic Performance of Students at the University of Lagos. Unpublish B.A. project, University of Lagos

Sasu, D.D. (2022*). Most used social media platforms in Nigeria as of the 3rd quarter of 2021*https://www.statista.com/statistics/1176101/leading-social-media-platforms-nigeria/

Snow, J. {2010). The Rise of Text Messages {lnforgraphic). Retrieved on March 22, 2011, from: http://mashable.com/2010/08/17text-messa1@g-inforgraphic/

Subair et al. (2019). Social Media: Usage and Influence on Undergraduate Studies in Nigerian Universities. *International Journal of Education and Development using Information and Communication Technology (IJEDICT),15* (3) 53-62

Thurlow, C. (2007). Fabricating Youth: New-Media Discourse and the Technologization of Young People. In S. Johnson and A. Ensslin (Eds) *Language in the Media: Representations, Identities, Ideologies* (pp. 213-233), London: Continuum.

Thurlow, C.& Brown, A., (2003). 'Generation Txt? The sociolinguistics of young people's text-messaging, in *Discourse Analysis Online*, viewed 20 December 2022, from http://extra.shu.ac.uk/daol/articles/v1/n1/a3/thurlow 2002003.html

Utuk, M. (2007). Innovation and Creativity in Language Use: A Study of the Language of SMS Text Messages, in Ndimele, O. (Ed). *Nigerian Language, Literatures, Culture and Reforms, a Festschrift for Ayo Bamgbose*. Port Hacourt: M & J. Orbit Communication Ltd.

Walther, B. J. (2013). Theories of Computer-Mediated Communication and Interpersonal Relation.