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Internet Linguistics: A Linguistic Analysis of Electronic Discourse as a New Variety of Language

Atef Odeh AbuSa'aleek[1]

[1] Unaizah Community College, Department of English Language and Translation, Qassim University, KSA

Correspondence: Atef Odeh AbuSa'aleek, P. O. Box 4394, Unaizah 51911, Saudi Arabia. E-mail: atefodeh@hotmail.com or ao.abusaaleek@qu.edu.sa

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Abstract

The revolution in the electronic communication may give rise to new modes of communication. Electronic discourse is a new variety of language that leads to significant variations in written structure of language. Electronic discourse creates a kind of semi-speech that is between speaking and writing and it has its own features and graphology. This study attempts to present a comprehensive picture of electronic discourse as a new variety of language, its salient features. In addition, it aims to conduct linguistic analysis of the features found in the electronic discourse. The corpus of this study was 340 messages with total 4760 words. The findings indicate that only 25% of overall the corpus found to be electronic discourse. This finding come inconsistent with common notion that the students' electronic discourse is incomprehensible, extremely shortened 'code'. In addition, findings revealed that students use variety of discourse features such as shortening, clippings and contractions, unconventional spellings, word-letter replacement.

Keywords: electronic communication**,** electronic discourse, internet linguistics, linguistic economy

1. Introduction

Change in language occurs, as change is natural. Language, as everybody knows, is dynamic. The advent of the Internet and the rapid development of electronic communication increase the rise of new kind of language. It caused dramatic changes in the language used in the internet. The Internet is widely used in learning of second language all over the world.

Crystal (2001) declares that technology offers opportunities for linguistic research: Netspeak is a new prospect for scholarly study. He summarize that "once in a lifetime" chance provided by the emerging means of communication. An innovative scholarly research of *"Internet Linguistics"* contains a comparative research of the variations of electronic discourse and the expansion of language revolutionize inside these means of communication. Graddol (1997) supported the above point that the innovative electronic communications increases the rise of new variety of language. The revolutions in the electronic communication may give rise to new modes of communication. The characteristics of spoken language are shared in the style of written transcript that used in electronic mail. New modes of communication might be produced by electronic communications.

The electronic communication considered as the important linguistic means. It covers every phase of human life, as well as the education and learning of the target language. English language is considered as the most prevalent verbal language in the globe due to its usage in innovative globalized media and trade; hence, there has been a main expansion in the numeral of English speakers worldwide. The use of the Internet and computer technology has significant impact on language change and usage. It has seen the appearance of a new language that is electronic discourse (hereafter as e-discourse).

E-discourse is taking new dimensions, mainly in the way students write. Studies in recent years have shown an explosion of interest in investigating the language used by youngsters in the electronic communication. (Collot & Belmore, 1996; Herring, 1996; Davis & Brewer, 1997; Abdullah, 1998; Crystal, 2001; 2006; Thurlow, 2001; Muniandy, 2002; Thurlow & Brown, 2003; MacFadyen, Roche, & Doff, 2004; Panckhurst, 2006; Pop, 2008; Plester, Wood, & Joshi, 2009; Sun Hong-mei, 2010; Baron, 2010; Varnhagen, McFall, Pugh, Routledge, Sumida-MacDonald, & Kwong, 2010; Jonge & Kemp, 2010; Lyddy, Farina, Hanney, Farrell, & Kelly O'Neill, 2014).

In the present study, the author uses the term e-discourse to signify the written form of the language used by youngsters in the electronic communication. This study attempts to present a comprehensive picture of electronic discourse as a new variety of language, its salient features. In addition, it aims to conduct linguistic analysis of the features found in the electronic discourse.

2. Electronic Discourse as a New Variety of Language

E-discourse is a new variety of language that leads to significant variations in written structure of language. Researchers have used varieties of terms to refer to the language used by youngsters in the electronic communication. 'electronic discourse' (Davis & Brewer, 1997; Panckhurst, 2006), 'electronic language' (Collot & Belmore, 1996), 'Computer Mediated Communication' (Herring, 1996), 'interactive written discourse' (Werry, 1996), 'Netlish', 'Weblish', 'Internet language', 'cyberspeak', 'netling' (Thurlow, 2001), 'cyberlanguage' (MacFadyen, Roche, & Doff, 2004), 'netspeak' (Thurlow, 2001; Crystal, 2006), and 'virtual language' (Pop, 2008).

According to Davis & Brewer (1997), the term e-discourse concentrates on how individuals use language to share and exchange ideas and views rather than on the medium or means by which they convey and deliver their communication.

Herring (1996, p. 1), state that ''*E-Discourse refers to text-based CMC, in which participants interact by means of the written word, e.g., by typing a message on the keyboard of one computer which is read by others on their computer screens, either immediately (synchronous CMC) or at a later point in time (asynchronous CMC)*''. Davis & Brewer (1997) define e-discourse as ''*one form of interactive electronic communication in which a person use a keyboard writes a language''*. Davis & Brewer (1997) state that the term *''electronic discourse''* refer to written talk *''writing that stands in place of voices''* (p. 2).

Lyddy et al. (2014) conducted study to analyze 13 characteristics of e-discourse. The corpus contains 936 English messages, with total (13391 words). The statistics showed that 25% of corpus used unconventional spelling. The findings revealed that the category of dropping capital letters is the most commonly occurring. In addition to, Types of unconventional spelling diverse slightly rely on the aim of the message, whereas the generally amount of unconventional spelling did not have significant differences.

AbuSa'aleek (2013) conducted a study to categorize the linguistic features of (Initialisms) that used in the language of (e-mail, chats, and web-based discussions and instant messages) and focuses on how the e-discourse has distinctive linguistic dimension.

Sun, Hong-mei, (2010) conducted a linguistic study to investigate the characteristics of internet English. Sun found that by analyzing the characteristics of the language of the internet, individuals could use resources available on the internet effectively and attain effective communication on the Internet. Baron (2010) examines discourse structures in instant messaging (IM) communications among American college students to investigated the validity of the a hypothesis that the users of CMC and the popular press commonly presume online platforms such as email and instant messaging (IM) is the mirror informal verbal language. The result indicates that IM communications among females bore more similarities to traditional written language.

Plester et al. (2009) investigated children's familiarity of 'textisms' and how it links to their school literacy achievement. Researchers examined 12 categories of Thurlow (2003) classification system along with questionnaires. The findings showed that there are relationships between the use of e-discourse and phonological knowledge. In addition, there was no relationship found between total use of textisms and the children's spelling and the score of non-word comprehension. In addition, findings indicate that there are significant differences based on gender in using of textisms in favour of girls.

Tagliamonte & Denis (2008) examined the language of instant messaging. They analyze the corpus of over a million words of instant messages. Results reveal that IM is strongly rooted in the form of the present language. In addition, the results demonstrate that there is variation and linguistics change in contemporary English. They sum up that instant messaging is a distinctive new hybrid of language, exhibit a combination of formal and vernacular variants. Thurlow (2003) conducted a sociolinguistics study entitled 'Generation Txt?' analyzing corpus of 544 to investigate the linguistic structures and communicative roles. The results indicate that the e- discourse is linguistically unremarkable, did not show the corruption of language and it used only to make skilled and creative interaction ability.

Muniandy (2002) conducted a study to argue that e-discourse is developing and becoming a new form of communication in its own right, and that teacher should be aware of it in the language classroom. Findings indicate that e-discourse notice the conventions of both communication and script, there are also unique characteristics that

symbolize it as an innovative discourse variety. These characteristics contain linguistic and structural quality, which are the outcome of the means used to communicate this variety of communication.

3. The Salient Features of the Electronic Discourse

The rapid development of e- communication has played an important role in affecting the nature of the linguistic varieties. E-discourse is a somewhat considered as innovative variety of discourse with its own features.

Lee (2009) states that the e-discourse in CMC considered popular variety of CMC that permits users to communicate with each other, e-discourse creates a kind of semi-speech that is between speaking and writing. Thus, it is similar to face-to-face communication in terms of interactivity. Crystal (2003, p. 433) states that ‘electronic discourse, as a way of information exchange, are *"unusual, compared to face-to-face interaction- but they are conversations"*.

Lee, (2002), Toyoda & Harrison, (2002) further note the presence of e-discourse features such as abbreviations, unconventional punctuation and misspelling because of the spontaneity, hence, learners tend to write briefly and informally. This spontaneity is the reason that leads to spellings errors and the utilization of non-standard punctuation, pronunciation, and upper case in e-discourse (Sims, 1996). Davis and Brewer (1997) declare that e-discourse is conversation in that it "presents a number of performance features generally characteristic of in process or 'in situ' communicative events and behaviours, such as repetition, direct address, disfluencies, and markers of personal involvement," including syntactic and lexical items. Abrams (2003) assert that e-discourse is different from verbal discourse in its written script, which relies greatly on reading and writing skills; therefore, users may require more time to comprehend input and output. Another feature found in research conducted in the area of e- discourse is the notion of linguistic economy. They point out a variety of techniques of economical language use in e-discourse, such as abbreviations, clippings, orthographic reduction, shortenings ellipsis (especially, deletion of pronouns) (Ferrara, Brunner, & Whittemore, 1991; Murray, 1990; Werry, 1996).

Crystal (2008, p. 7-8) states that ‘‘*texting has evolved as a twenty-first-century phenomenon – as a highly distinctive graphic style, full of abbreviations and deviant uses of language, used by a young generation that doesn’t care about standards. There is a widely voiced concern that the practice is fostering a decline in literacy. And some even think it is harming language as a whole ‘Text messages destroying our language’’*

According to Lee (2001, 2006) & Smith (2003), the users of e-discourse apply other means to convey their emotions and facial expressions. They Invented linguistic devices including onomatopoeia (e.g., lol = laugh out loud, btw = by the way) and keyboard symbols using smiley faces (e.g., :-)) are commonly found in e- discourse to make up for the absence of paralinguistic features of real time communication.

Averianova (2012, p. 15) state that ‘‘*the unique linguistic and iconographic features of electronic writing comprise but are not limited to innovative abbreviation (acronyms, clippings, logograms, or letter-numeral hybrids and letter-morpheme substitutes, vowel deletion, etc.), emoticons, truncated simplified syntax, non-normative capitalization and other characteristics’’*.

It can be concluded that the communication via electronic communication mediums may facilitate the rise of new variety of language that is e-discourse and create new forms and functions of language. Hence, researchers concur that the e-discourse has unique characteristics, which make it distinctive. A common appearance of its most frequent linguistic patterns would comprise shortening, clippings and contractions, unconventional spellings, word-letter replacement, word-digits replacement, word combination, initialisms and emoticons.

4. Methodology

4.1 Participants

The study conducted in the Department of English Language and Translation, Unaizah Community College and Arts & Science College at Qassim University in Kingdom of Saudi Arabia. For this purpose, (160) students in the Department of English Language and Translation, were randomly chosen to participate in this study, participants were enrolled in a B.A program. The average age of students is 22 years.

4.2 Corpus of the Study

The corpus of this study was collected from 160 undergraduate students’ e-discourse. The researcher asked the students to provide sample of their e-discourse to make a linguistic analysis of the new variety of language and its salient features. Every individual provide 2 of their e- discourse. Students were informed of the aims of the study and the data only will be used for the academic purposes. The students also provide their demographic information such as their names, age, and level of the study. The corpus of this study was 340 messages with total 4760 words. Only 25 % of overall the corpus found to be e-discourse with total words of 1190. Coding of e-

discourse based on the categories used by Thurlow & Brown (2003), Plester et al. (2009), Jonge & Kemp (2010), and Lyddy et al. (2014) to analyze natural corpus. The researcher adopted the following nine categories.

- Shortening
- Clippings
- Contractions,
- Unconventional Spellings
- Word-Letter Replacement
- Word-Digits Replacement
- Word Combination
- Initialisms
- Emoticons

5. Results

The following section will be devoted to the analysis of corpus in term of frequency and percentage. In addition to analysis of important salient features found in students' e-discourse. Definition of each feature will be given along with samples of students' e-discourse and their standard form in the following tables. Frequencies and percentage of e-discourse' features were calculated.

5.1 Statistics and Data Analysis

Table 1. Frequencies and percentage of e-discourse' feature

E-discourse' Feature	No. of frequency	Percentage of each category
Shortening	159	13.36 %
Clippings	83	6.97 %
Contractions	174	14.62 %
Unconventional spellings	193	16.21 %
Word-letter replacement,	167	14.03 %
Word-digits replacement	153	12.85 %
Word combination	47	3.94 %
Initialisms	133	11.17 %
Emoticons	81	6.80 %
Total	1190	100 %

Table 1 shows the frequencies and percentage of e-discourse' feature found in corpus of 1190 words. Students' e-discourse includes a wide range of e-discourse' features. The researchers identified 9 e-discourses' features namely shortening, clippings and contractions, unconventional spellings, word-letter replacement, word-digits replacement, word combination, initialisms and emoticons. It can deduced from our analysis is that regardless of their situation considered "noteworthy phenomena". The language of the internet is characterized by unconventional orthography (Crystal, 2001).

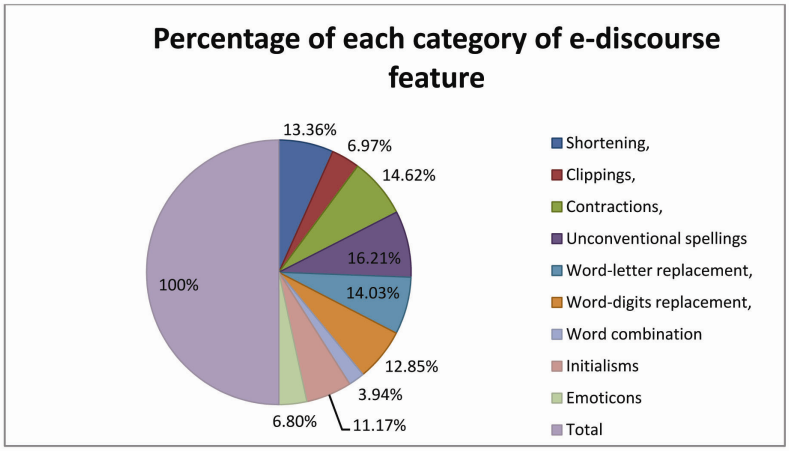

Figure 1. Frequencies of e-discourse' feature

Remarkably, e-discourse considers a general characteristic of interactive online communication. Researcher found that majority of the students used e-discourse when they communicate via the e- communication. Hence, by analyzing the corpus of 4760 words only 25 % of overall the corpus found to be e- discourse with total words of 1190, that mean every discourse contain only 3 features of e-discourse. Therefore, this finding come inconsistent with common notion that the students' e-discourse is incomprehensible extremely shortened 'code'. Figure 1. gives an account of frequencies of e-discourse feature found in students' discourse. The e-discourse feature that got the highest number of frequency is unconventional spelling with 193 occurrences out of 1190. Whereas the e-discourse feature that got the lowest number of frequency is word combination with 47 occurrences.

Another frequent feature of e-discourse is contractions with 174 occurrences, followed by word-letter replacement with 167 occurrences, shortening with 159 occurrences, word-digit replacement with 153 occurrences, initialisms with 133 occurrences, clippings with 83 occurrences and emoticons with 81 occurrences.

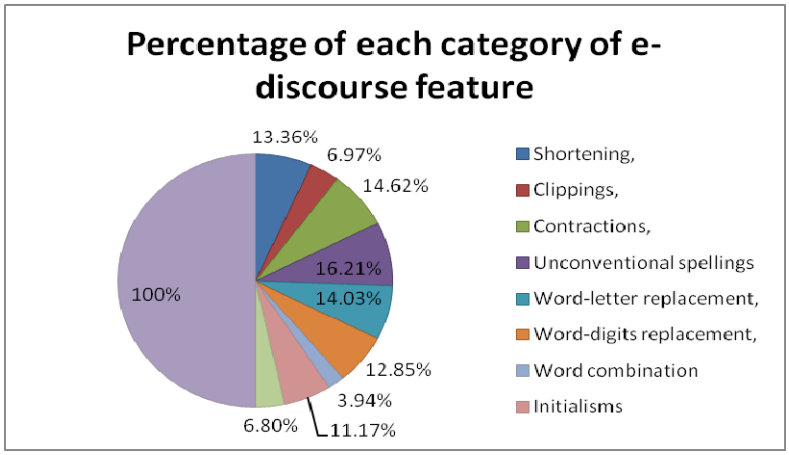

Figure 2. Percentage of each category of e-discourse' feature

Figure 2 shows data in percentage of each category of e-discourse' feature found in students' discourse. The category of e-discourse feature that got the highest percentage is unconventional spelling with 16.21%. While the category of e-discourse feature that got the lowest percentage is word combination with 3.94%.

Another common feature of e-discourse is contractions with 14.62%, followed by word-letter replacement with 12.85%, shortening with 13.36%, word-digit replacement 12.85%, initialisms with 11.17%, clippings with 6.97% and emoticons with 6.80%.

The following represent results related to the features found in students' e-discourse

5.2 Shortenings, Clippings and Contractions in Students' E-Discourse

The existence of this category of shortenings, clippings and contractions in students' e-discourse has to be approved, yet its status seems to be unexpectedly in e-discourse. Shortenings mean to drop the final letters of a word (Thurlow & Brown, 2003). Crystal (2008) defined clipping as the drop of initial or final letters of the word, hence, the meaning of the word still retaining. Contractions refer to shortened type of a word. It also includes dropping the vowels from the medial position of the word. Only some words in English can be shortened such as auxiliary verbs, hence, contractions considered as symbol of colloquial language (Crystal, 2008).

Table 2. Illustration of shortenings, clippings and contractions & their standard form

Feature of E-Discourse	E-Discourse Form	Standard Form
Shortenings	Bro	Brother
	Sis	Sister
	Lang	Language
	Fri	Friday
	Feb	February
	Aft	After
Clippings	Til	Till
	Wil	Will
	Hav	Have
	Wher	Where
	I'l	I will
	Goin	Going
	Smilin	Smiling
	Talkin	Talking
	Drivin	Driving
	meetin	Meeting
Contractions	Don't	Do not
	Gd	Good
	Nxt	Next
	Frm	from
	Bt	But
	Wkend	Weekend
	Tmrw	Tomorrow
	Abt	About
	Bck	Back
	nw	Now

5.3 Unconventional Spellings in Students' E-Discourse

Unconventional spellings refers to the written form of words as it sounds but they are not standard spelling for the target word. Unconventional spellings consider one of the most important features of e-discourse, hence the reason behind unconventional spelling either economic, typing errors or lack of familiarity of the accurate spelling.

Table 3. Illustration of unconventional spellings & their standard form

Feature of E-Discourse	E-Discourse Form	Standard Form
Unconventional spellings	Gud	Good
	Shud	Should
	Sory	Sorry
	Thanx	Thanks
	Sum	Some
	Masseg	Message
	plez	please

5.4 Word-Letter Replacement in Students' E-Discourse

Word-letter replacement refers to the process of replacing word by single letter. This strategy considers one of the most important features of e-discourse used by internet users because English language includes monosyllabic expression. This give rise to use single letter, which has the same sound of word. The following is list of examples of e- discourse in which limited words replaced by single letters.

Table 4. Illustration of word-letters replacement & their standard form

Feature of E-Discourse	E-Discourse Form	Standard Form
Word-letter replacement	Y	Why
	U	You
	B	Be
	R	Are
	S	is
	C	See, sea
	K	okye
	D	the

5.5 Word-Digit Replacement in Students' E-Discourse

Word-digit replacement is one of the salient features of e-discourse in which digit used to substitute a word, syllable or phoneme. Word-digits replacement used frequently in the e-discourse and found much in internet uses' e-discourse. The internet users use digits to substitute a word, syllable or phoneme, which has the identical pronunciation.

Table 5. Illustration of word-digits replacement & their standard form

Feature of E-Discourse	E-Discourse Form	Standard Form
Word-digits replacement	4	For
	2	Two, too, to
	1	One
	8	Ate

5.6 Word Combination in Students' E-Discourse

Word combination in students' e-discourse considers one of the most significant characteristics of e-discourse. Word combination also refers to phonological approximation in which the word pronounces as informal speech. Crystal (2008) refers to word combination as accent stylizations in which the internet users write the words in accord with informal local language, Thelwall (2009) also uses the term accent stylisations to refer to humorous alternatives. Plester, Wood & Bell (2008) use the term "youth code" to refer to word combination.

Table 6 Illustration of word combinations & their standard form

Feature of E-Discourse	E-Discourse Form	Standard Form
Word combination	Wanna	Want to
	Gonna	Going to
	lemme	Let me
	Dunno	Do not know
	Gotta	Got to

5.7 Initialisms in Students' E-Discourse

Initialisms are used frequently in the internet and consider obvious feature of e-discourse. According to Crystal (2008), acronyms and initialisms refer to the initial letters of each word. David Crystal (2001:84) declares that:

"The various types of abbreviation found in Netspeak have been one of its most remarked features. Acronyms are so common that they regularly receive critical comment....The chat groups and virtual worlds also have their abbreviations, some of which turn up on e-mail and in personal Web pages".

Table 7. Illustration of initialisms & their standard form

Feature of E-Discourse	E-Discourse Form	Standard Form
Initialisms	AFAIK	As far as I know
	ASAP	As soon as possible
	IDK	I do not know
	CMB	Call me back
	LOL	Lough out loud
	IMO	In my opinion
	IRL	In real life

5.8 Emoticons in Students' E-Discourse

Emoticons refer to typographic symbols made via keyboard to convey feelings such as smiling, sadness, laughing, crying, annoying, surprising and winking.

According to Crystal (2008), Emoticons permit us to convey our response and reactions, hence the facial expressions and visual signals are almost not present in printed forms of interaction. Emoticons are typographic codes used to express feelings and emotions.

Table 8. Illustration of emoticons & their standard form

Feature of E-Discourse	E-Discourse Form	Standard Form
Emoticons	:)	Smile
	:(	Sad
	:D	Laugh
	:'(	Crying
	;-)	Wink
	:/	Annoyed,
	:O	Surprise

6. Discussion

The present discussion is divided into two basic concerns. The first devoted to the results of this study, which is the analysis of corpus in term of frequency and percentage. In addition to analysis of important salient features found in students' e-discourse and the second is comparing the findings of analysis of e- discourse corpus with previous studies conducted in the same area.

This investigation conducted to examine the e-discourse' features of a large corpus of students' e-discourse. In analysis of total 4760 words only 25 % of overall the corpus found to be e-discourse with total words of 1190 and the majority of the corpus is standard form. Moreover, the following features found in students corpus namely shortening, clippings and contractions, unconventional spellings, word-letter replacement, word-digits replacement, word combination, initialisms and emoticons. This finding is in consistent with previous studies (Lyddy et al., 2014; Ling & Baron's, 2007; Crystal, 2008; Tagliamonte & Denis, 2008; Ling, 2005; Thurlow & Brown, 2003).

Lyddy et al. (2014) found in their study that 25% of corpus used unconventional spelling. In Thurlow & Brown's (2003) study, the percentage of the abbreviated form found in the sample corpus is 19% of total content. Ling (2005) demonstrated that only 6% of overall words in texts afford by a Norwegian group were shortened. Whereas Ling & Baron's (2007) found only less than 5% of the corpus was abbreviated words and the rest was standard form.

Farina & Lyddy (2011) found the most frequently occurring features of e-discourse are unconventional spellings, word combination and less frequent occurring features are emoticons, word-letter replacement and word-digits replacement. They sum up that the e- discourse is not as nonstandard as media pictured and want us to believe.

The findings of this study are inconsistent with Tagliamonte & Denis (2008) hence, their finding demonstrate that there is variation and linguistics change in contemporary English and e-discourse is a distinctive new hybrid of language, exhibit a combination of formal and vernacular variants.

The existence of un-conventional language is associated with some words in English e-discourse, whereas the greater part of e-discourse content is standard forms. E-discourse makes the most of shortening (bro for brother), clippings (I'l for I will) and contractions (abt for about), unconventional spellings (Shud), word-letter replacement

(y for why), word-digits replacement (2 for two, too, to), word combination (Donno), initialisms (AFAIK) and emoticons (;-)).

7. Conclusions, Limitations and Implications

The above analysis has demonstrated that English make use of e-discourse categories and offers many of shortening process in communication. In summing up, even though there is need to use shortening in communicating via electronic communication and it appears to be universal. The frequency and its occurrences will vary depending on many factors such as language, exposure to the e-discourse, and sitting where the language is used. According to the results of this study, only 25 % of overall the corpus found to be electronic discourse with total words of 1190, that means every discourse contain only 3 features of e-discourse. Therefore, this finding come inconsistent with common notion that the students' e-discourse is incomprehensible extremely shortened 'code'. Furthermore, this study demonstrates that the category of e-discourse feature that got the highest percentage is unconventional spelling with 16.21% with 193 occurrences out of 1190. While the category of e-discourse feature that got the lowest percentage is word combination with 3.94% 47 occurrences.

However, having limitations are very common in research; the present study has some limitations that need to be taken into consideration in view of data. Participants of this study consisted of 160 undergraduate students and the corpus may be bias because it is from students' choice and selection and they are fully aware that the language of the corpus will go under investigation. Another limitation is that the entire samples are male students. Therefore, the results of the study cannot be completely generalized beyond its sample.

The results show that the students use the e-discourse when interacting between them. The pedagogical implication of this study is that the English handwritings of the students will be in danger if they increase use of the language of e-discourse. Therefore, there is urgent need to raise students' awareness of the linguistic variants between the language of electronic communication and the standard form. In addition, the unique characteristics of the e-discourse can be introduced to the students to increase their awareness of different discourse category.

The results of the current study suggest that there is critical need for further research in this field to fill the gap in research. This research could be replicated with a larger number of students (males & females) to present a clear and more generalizable representation about the investigated phenomenon. Further studies and researches can be carried on other respondents to disprove or verify these results. In addition, this paper is restricted only to the 9 major category of e- discourse. Further studies may be carried on to investigate other aspects of e-discourse.

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