A Corpus Analysis of Engagement Markers in Facebook Status Updates: Exploring Age and Gender Effects

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Abstract

There has been an increasing interest in the way authors address the presence of their readers over the past few years. One of the most popular social networking sites nowadays is Facebook where millions of users have found a suitable platform to sketch their personal experiences; present their own perspectives, comments, and reflections; and express their own feelings. The theoretical and analytical framework for this study is Hyland's (2005a,b) Model of Interaction which was originally proposed for academic texts. The present study involves extending the application of this model to online Facebook interactions. The freeware corpus analytic toolkit AntConc (version 3.5.8) is used for concordancing and posts' analysis. This study investigates the use of engagement markers in 1500 Facebook status updates written in English by 200 Egyptian male and female students as well as Egyptian male and female academic staff. It examines how gender and age variables may affect the expression of engagement in the Facebook interactions under study. The results reveal weak age and gender distinctions with regard to the type and frequency of the engagement features under study.

الملخص العربي:

على مدار السنوات الماضية وجد اهتمام متزايد بالطريقة التي يعالج بها المؤلفون حضور قرائهم في كتابتهم. فيسبوك، كواحد من أشهر مواقع التواصل الاجتماعي، أتاح لملايين المستخدمين منصة مناسبه للتعبير عن تجاربهم الشخصية ومشاعرهم، ووجهات نظرهم، وتعليقاتهم، وتأملاتهم. في ضوء ذلك، تبحث الدراسة الحالية استخدام علامات المشاركة التفاعلية للتفاعل مع الاخر التي يستخدمها الكتاب لإشراك قرائهم المستخدمة من قبل الطلاب وأعضاء هيئه التدريس المصريين من الاناث والذكور من خلال تحليل ١٥٠٠ من المشاركات في تحديثات الحالة في منشورات الفيسبوك المكتوبة باللغة الإنجليزية (كلغة ثانية). تتبني الدراسة نموذج هايلاند (أ،ب ٢٠٠٥) التفاعلي والذي تم اقتراحه واستخدامه في الأصل لتحليل نصوص الكتابة الأكاديمية، وتقدم الدراسة مقترح للتوسع في تطبيق نموذج هايلاند التفاعلي ليشمل المنشورات التفاعلية على موقع التواصل الاجتماعي فيسبوك. تم استخدام برنامج الحاسوب للتحليل النصي ومحرر النصوص المجاني AntConc (version 3.5.8) لإجراء تحليل المتن اللغوي في انشاء التوافقات ومجموعات من الكلمات حسب تكرار ظهورها في منشورات الفيس بوك المستخدمة. وتشير نتائج الدراسة الي ان المنشورات المختارة توظف النص لتبرز سمات التفاعل مع الاخر في المنشورات الفيس بوك التفاعلية قيد الدراسة كما تشير نتائج الدراسة أيضا عن وجود تأثيرات هامشية بسبب الفروق العمرية في عينة الدراسة وتشير نتائج الدراسة ايضا الي ان المنشورات المختارة توظف النص لتبرز سمات التفاعل مع الاخر في المنشورات الفيس بوك التفاعلية قيد الدراسة. بالاضافه الي وجود اختلاف هامشي بين الاناث والذكور فيما يتعلق بالنوع وتكرار الظهور في استخدام السمات التي تتعلق بتوظيف الكاتب وإبراز سمات التفاعل مع القارئ لإقناعه.

الكلمات الدالة: فيسبوك، علامات التفاعل مع الاخر، المتن اللغوي، العمر، النوع، برنامج التحليل النصي النوعي ومحرر النصوص المجاني

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1. Introduction

Social networking sites (SNS) have become popular channels of communication in Egypt, and they have an enormous effect on people's lives. In the last few years, computer-mediated communication (CMC) has become an integral part of the way in which people communicate with each other. The majority of people spend most of their waking hours using these sites. Facebook is one of these computer mediated discourse types to which users resort to sketch their personal experiences, present their own perspectives, comments, and reflections, and express their own feelings. According to Hyland (2001, 2005a, b), engagement relates to the way in which writers rhetorically acknowledge the presence of their audiences in a text. It is essential for effective writing, and it is particularly important in distinctive genres where authors should guide their thought, craft their texts, and expect their potential replies to involve readers as participants. Engagement is varied across disciplines (e.g., Kuo, 1999; Hyland, 2004b), and it is a significant strategy in a range of genres such as undergraduate dissertations (Hyland, 2004d), research articles (Hyland, 2005; Youssef, 2016), popular science articles (Hyland, 2010), PhD confirmation reports (Ma, Jiang & yang, 2017), as well as business emails (Carrió-Pastor, 2019). The present study extends the investigation of engagement practices beyond established academic and professional texts. Adopting a quantitative-qualitative approach, the study aims at examining engagement in the electronic discourse as a relatively new and rapidly growing genre. Using Hyland's (2005) engagement model and drawing on 1500 Facebook status update posts, the study investigates the way Egyptian male and female students as well

as Egyptian male and female academic staff acknowledge the presence of their readers and establish reader-writer readership in their Facebook online interactions.

The aim of the present study is threefold. First, it qualitatively investigates the potential effects of the age and gender variables on the linguistic realizations of engagement markers in 1500 Facebook status update posts written in L2 (English) by four participant groups affiliated to Sadat Academy of Management Sciences: Egyptian male and female (M/F) students as well as Egyptian M/F academic staff. Second, while assuming an initial null hypothesis, the study quantitatively examines the potential effects of the age and gender variables on the frequency of using the identified expressions of reader engagement in the Facebook interactions under study. Finally, the study explores application of Hyland's (2005b) Model of Interaction to electronic social media discourse, especially that the model was originally proposed for published academic discourse. In the present data, on the other hand, students and academic staff often engage in casual conversations or formal/informal discussions about their personal everyday life experiences as well as specialized academic matters. To these aims, the study addresses the following research questions:

1- How do students and academic staff seek to engage their readers in their Facebook status updates?
2- To what extent do age, gender, and status differences affect reader engagement strategies?
3- How can Hyland's model of interaction be extended to electronic social media discourse?

2.Theoretical Framework: Hyland's (2005a,b) Interaction Model

Hyland's (2005a, b) Interaction Model proposes nine different rhetorical means that allow stance to the writer and engage the reader in the text. Consequently, stance and engagement are the essential categories of Interaction Model; the framework can be presented as follows:

Stance is a writer-oriented interaction, which indicates the position a writer presents in a text. The stance of the writer in a discourse is recognized by the use of hedges, boosters, attitude markers, and self-mention. The present study adopts Hyland's (2005a,b) taxonomy of engagement strategies, which has been widely used by various studies (e.g., McGrath & Kuteeva, 2012; Ma, Jiang, & Yang (2017) & Ma, 2017)

to analyze academic texts such as research articles and student written discourse.

Hyland (2005a,b) subcategorizes engagement features as reader pronouns, directives, questions, shared knowledge, and personal asides. As the focus of the present study is the use of engagement features, its sub-categories need further explanation; the framework can be presented as follows:
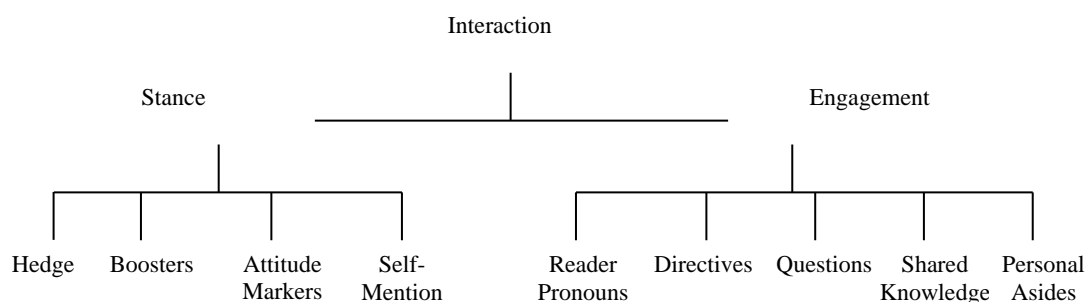

Figure 1

Hyland's Model of Interaction. Source: (Hyland, 2005,b. p.175)

1- Reader pronouns are possibly the most obvious way in which readers are brought into a discourse. *You* and *your* are actually the richest means of recognizing the reader's presence in the text. Instead, there is an enormous emphasis on binding writers and readers together through the inclusive we, which is the most common engagement device in academic writing. It is a clear textual signal of membership since it helps in constructing both the writer and the reader as participants who have similar understanding and goals. (Hyland 2005,b)

2- Directives guide readers to perform an action or to perceive things in a way determined by the writer. They are mainly indicated by the use of an imperative (like *consider*, *note*, and *imagine*); a modal of obligation addressed to the reader (such as *must, should*, and *ought*); and a predicative adjective stating the writer's judgment of necessity/importance (*It is important to understand*) (Hyland 2002).

3- Questions enhance appealing engagement and dialogic participation by bringing the readers into a ground where they can be directed to the writer's viewpoint (Hyland, 2002). They grasp the readers' attention and inspire them to consider an unresolved issue with the writer as equal conversational companions who share the writer's interest and pursue the presented argument. According to Hyland (2005b), questions perform a range of purposes in academic writing and can have diverse authoritative impressions. Questions can also address different characteristics of the

methodology, elements of the research or larger topics of inquiry. In all cases, they address direct knowledge because the reader is treated as someone with an interest in the issue raised by the question, the capability to identify the significance of enquiring it, and the good sense to follow the writer's Reply to it. As Webber (1994, p. 266) postulates, questions generate "anticipation, arouse interest, challenge the reader into thinking about the topic of the text, and have a direct appeal in bringing the second person into a kind of dialogue with the writer, which other rhetorical devices do not have to the same extent (p.266).

4-Appeals to shared knowledge pursue to position readers within apparently naturalized boundaries of disciplinary understandings. The concept of 'sharedness' is associated with writers' intention to present interrogated ideas. Besides, they provide explicit markers where readers are asked to identify something as familiar or accepted. Apparently, readers can only be brought to agree with the writer by constructing some kind of implied contract regarding what can be accepted, but these constructions of solidarity include explicit calls asking readers to recognize specific interpretations (Hyland 2005,a).

5- Personal asides permit writers to address readers directly by briefly interrupting the argument to bid a comment on what has been said. While asides express something of the writer's personality and readiness to explicitly interfere to offer a view, they can also be seen as a key reader-oriented strategy. By turning to the reader in mid-flow, the writer recognizes and replies to an active audience, often to initiate a brief discourse that is largely interactive. (Hyland 2005,b) Taking Hyland's interactional model as a framework, this study will explore and examine the use of the engagement markers in status updates.

3. Literature Review

3.1 Engagement

Numerous studies have examined metadiscourse in academic writing. The present study extends the investigation of engagement practices beyond established academic and professional texts. It aims at examining engagement in a relatively new and rapidly growing genre: the electronic discourse. Using Hyland's (2005a,b) engagement model and drawing on 1500 Facebook status update posts, the study endeavors to identify how Egyptian male and female students as well as Egyptian male and female academic staff acknowledge the presence of their readers and how they formulate reader-writer relationships in their Facebook online interactions.

The present review focuses on the studies that examine all or some of the interactional metadiscursive markers of engagement presented in Hyland's (2005a, b) Model of Interaction. The selection of these reviewed studies relates to their use of corpus analytic concordance tools. Many scholars explore different dimensions of writer-reader relationship in their studies (e.g., Ochs, 1989; Conrad & Biber, 2000; Hunston & Thompson, 2000; Martin, 2000). These scholars focus only on the use of rhetorical strategies of appraisal, evaluation, affect, evidentiality, hedging, and stance. Recently, Hyland (2005a, b) proposes a comprehensive model of interaction that illustrates how writers bring their identity, opinion, and interpersonal judgments into discourse by making certain rhetorical choices in their writings.

Various studies investigate engagement in student and expert writings. The results of Hyland's (2005b) investigation and comparison of engagement features in the two corpora reveal the manifestation of engagement devices in both student and expert academic writing, but the target markers used by students are significantly less frequent than those that are displayed in expert writings. The findings suggest that reader-writer interaction should be obviously clarified in classrooms in order to enhance students' awareness of their selections and control over their writings.

In another study, Hyland (2008) applies his Model of Interaction to the academic discourse of 1.2 million words. He analyzes research articles from eight different disciplines, e.g., Sociology, Mechanical Engineering, Marketing, Physics, Philosophy, Electric Engineering, Microbiology, and Applied Linguistics. The study shows that writers frequently use stance and engagement markers in academic research discourse. The findings of the study reveal that in all the selected disciplines, stance markers are more frequent than engagement markers. Furthermore, stance and engagement markers have the highest frequency recurrences in the field of Philosophy and the lowest frequency recurrences in Microbiology and Mechanical Engineering.

Using a framework of 'engagement', Hyland (2001) focuses on approaches which writers use to characterize their readers rather than themselves. They use language to structure and convey interactions with their recipients. The study shows that the patterns observed in L2 undergraduate reports reveal the writers' awareness of at least some of the varieties available to them, but they see the relationship they need to create with their readers as reasonably limited and reserved by concerns of influential power, rhetorical assurance and, perhaps, cultural preference.

Further cross-disciplinary effects have been observed by Malik et al. (2020). Based on an analysis of a corpus of 120 PhD theses from two different disciplines, Malik et al. (2020) conducts a cross-disciplinary analysis of PhD theses in natural and social sciences to investigate the rhetorical choices of engagement features in Pakistani academic discourse (PARD). The study adopts Hyland's Model of Interaction (2005b) and, for corpus analysis, Antconc was applied. The results of the study reveal that social sciences' writers use rhetorical features to maintain a writer-reader relationship in their research discourse more frequently than their natural sciences' counterparts.

Hassan et al. (2019) investigates the language used by male and female Pakistani journalists by focusing on the use of interaction markers. The study explores the meta-discourse markers in the writings of the Pakistani English newspaper journalists. The data is collected from Dawn, The News, The Nation and The Express Tribune newspapers. The corpus for the research includes two hundred columns written by forty male and female Pakistani journalists. The study adopts Hyland's (2005a) model of interactional meta-discourse. A qualitative and quantitative analysis is used to find out the gender-based differences in the use of interaction markers in the writings of Pakistani journalists. Furthermore, AntConc, a corpus-based tool, is employed to statistically analyze the corpus of the study. The findings indicate that there are significant gender-based differences in the use of interaction markers. The female Pakistani columnists employ interaction markers more frequently than their male counterparts. The study provides national and international researchers with a new insight into gender-based differences in media discourse within the Pakistani context.

In a cross-linguistic study, Zarei and Mansoori's (2011b) examines both interactional and interactive metadiscourse markers in the same two languages (English and Persian), respecting 10 equally divided research articles in the discipline of computer engineering. The findings of the study reveal that English authors tend to use more interactional markers, especially engagement features which signals their eagerness on establishing a relationship with the readers. Another result is that while English authors mostly use hedges and evidentials to voice their perspectives with more wariness and dependance on documented facts, Persian authors frequently use boosters to express their opinions more directly.

Further cross-linguistic effects are observed by Taki and Jafarpour (2012) who focus on academic writing to explore linguistic features used

by authors to create interactions with their readers. Taki and Jafarpour (2012) analyze 120 English and Persian research articles in the two disciplines of chemistry and sociology. Following Hyland's model of interaction (2005), they investigate the ways in which English and Persian academics express their position to find out the strategies employed to engage readers in their writing. The findings of the study report the importance of stance and engagement markers in writings.

In another corpus-based study, Yang (2014) compares speech discourse in the use of stance and engagement markers in soft and hard science domains. Based on 132 blog posts from both soft and hard disciplines, Zou and Hyland (2019) conduct a study to investigate blogger's use of engagement features. The study adopts Hyland's (2005) taxonomy of engagement features to explore how disciplinary conventions influence the use authors make of engagement resources in academic blogs. They select blog posts from three academic blog websites in applied linguistics, life sciences, education and physical science academic domains. The findings of the study reveal that blogs in soft disciplines have significantly more reader mentions, questions and directives, while hard science blogs depend on resources which claim relatively more writer authority and demand more shared understanding.

Rahimpour (2014) adopts Hyland's taxonomy (2005) to analyze online comments as well as the original posts of English speakers of blog writers in the field of applied linguistics and education. The results of the study reveal that English blog's writers use attitude markers to explain their attitudes toward what they are discussing.

In another study, Anuarsham, Rahmati, and Khamsah (2020) adopt Hyland (2005) and Lakoff's (1975) interactional metadiscourse models to analyze the presence of interactional metadiscourse features in an online entertainment article on Netflix in Malaysia. The quantitative findings of the study reveal that the four elements of interactional metadiscourse are all employed in the article text. The results also indicate that engagement markers are the most frequent interactional metadiscourse employed by the author. The findings suggest that entertainment online articles employ the incorporation of interactional metadiscourse as efficiently as other genres of online articles do. It is significant that the most common interactional marker in the article is the use of engagement features which indicate the author's employment of the functions of writer and reader relationship oriented in the text. For this online entertainment article document, the broad use of interactional metadiscourse is significant as the acknowledgement of writers and readers of how important the role of metadiscourse in writing is as it reflects on how information is delivered

and presented. It can help writers to develop how to present text information to the audiences in their writing with more precise and appropriate words and phrases.

3.2 Computer Medicated Communication (CMC)

Electronic discourse is a new variation of language that leads to substantial variations in the written structure of language. It generates a kind of semi-speech that is between speaking and writing, and it has its own characteristics and graphology.

Herring (1996, p. 1), states 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 instantaneously (synchronous CMC) or at a later point in time (asynchronous CMC)". Davis & Brewer (1997) state that "electronic discourse focuses on how individuals use language to exchange ideas rather than on the medium or channel by which they transfer and deliver their messages" (p.2). Davis & Brewer (1997) add that the term "electronic discourse is writing that very often reads as if it were being spoken-that is, as if the sender were writing talking" (p.2).

Several scholars (Denis 2005, Herring 1999 and 2001) have used interchangeable terms to define computer-mediated communication (CMC), (CMD), Internet language, Net speak, electronic discourse and cyber speak, though each term has a distinct implication. According to them, Computer Mediated Communication (CMC) is defined as any type of human communication that occurs via electronic devices, computer-mediated formats (e.g., instant meaning, email, chatrooms, online forums, social network services). CMC has also been applied to other forms of text-based interaction such as text messaging. The term CMC, according to Herring (1996), refers to the kind of communication that "takes place between human beings via instrumentality of computers" (p.1). Later, Herring (2002) uses the term CMD "as a specialization within the broader interdisciplinary study of CMC, distinguished by its focus on language and language use in computer networked environments, and by its use of methods of discourse analysis to address that focus" (p.10), adding that it is predominately-text based.

Crystal (2001) emphasizes that CMC deals with the medium itself, while electronic discourse focuses on the interactive and dialogue elements only. He explicates that the term "net speak" involves "writing as well as talking, and 'speak' suffix also has respective elements including listening and reading" (p.19). He gives a definition of net speak

as "a type of language displaying features that are unique to the internet arising out of its character as a medium which is electronic, global, and interactive" (p.20).

(a)   3.2.1 **Previous Studies on CMC**

Abousaaleek (2015) conducts a study to examine the e-discourse' features of a large corpus of students' e-discourse. In the analysis of l 4760 words, only 25% of the overall corpus is found to be e-discourse with total words of 1190 and the majority of the corpus is standard form. The students' corpus includes features like shortening, clippings and contractions, unconventional spellings, word-letter replacement, word-digits replacement, word combination, initialisms and emoticons. The findings of Abousaleek's (2015) study show consistence with the previous studies of (Lyddy et al., 2014; Ling & Baron's, 2007; Crystal, 2008; Tagliamonte & Denis, 2008; Ling, 2005; Thurlow & Brown, 2003). The study of Lyddy et al. (2014) demonstrate that 25% of the corpus includes unconventional spelling. In Thurlow & Brown's (2003) study, the proportion of the abbreviated forms found in the sample corpus is 19% of the total content. Ling (2005) reveals that only 6% of the words in texts produced by a Norwegian group are shortened. Similarly, Ling & Baron (2007) demonstrate that only less than 5% of the corpus exhibit abbreviated words, and the rest are standard forms.

Farina & Lyddy (2011) find that the most frequently occurring features of e-discourse are unconventional spellings and word combination, while the least frequently occurring features are emoticons, word-letter replacement and word-digits replacement. They conclude that the e- discourse is not as nonstandard as media visualized discourse. Besides, their findings reveal that there are distinctions and linguistic changes in contemporary English and e-discourse as a distinct new hybrid of language that displays a mixture of formal and vernacular variations. The presence of un-conventional language is associated with some words in English e-discourse, while the greater amount of e-discourse content encompasses standard forms. E-discourse exhibits shortenings (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 (☺).

(b)   3.2.2 Linguistic Features of CMC

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

Lee (2009) states that the e-discourse in CMC is a popular variety of CMC that permits users to communicate with each other. It creates a kind of semi-speech that is between speaking and writing.

It is a popular belief that computer mediated language (CMD) is less correct, less complex and less coherent than standard language. Herring (2012) describes messages posted to the Internet as "a whole new fractured language definitely not as elegant or polished as English used to be" (p.6). Herring supports Baron's (1984) predication that participants in computer conferences would use "fewer subordinate clauses and a narrower range of vocabulary because of computer communication over time and the expressive functions of language could be diminished" (p.131). Subordination is an indicator of syntactic richness/complexity, and lexical diversity is an indicator of a rich diction. Both lexical diversity and syntactic richness contribute to grammatical richness.

According to Murray (1990), Internet language often contains non-standard features. This relates to the deliberate choices made by users to economize on typing, mimic spoken language features, or express themselves creatively. Herring (1998) justifies that the non-standard features of computer-mediated language are due to errors caused by inattention or lack of knowledge of the standard language forms. However, it should be noted that there is a difference between a non-standard feature and an error. The latter violates the grammatical accuracy of the message. The former can be related to language use and the level of formality. Murray (1990) observes that computer professional users using synchronous CMD in a workplace environment "delete subject pronouns, determiners, and auxiliaries, use abbreviations; do not correct typos; and do not use mixed case" (p.44).

Crystal (2005) differentiates between Internet language as a new medium of communication and traditional conversational speech and writing. The difference between internet language and speech is due to its lack of "simultaneous feedback (Critical to successful conversation), the absence of a segmental phonology (or tone of voice, which emotions attempted but failed, to express), and its ability to carry on multiple interactions simultaneously (in classrooms)" (p.4). The difference between CMC and writing includes its "dynamic dimension (through such effects as animation and page refreshing), its ability to frame messages (as in email cutting and pasting), and its hyper textuality (only hinted at in traditional writing through such notions as the footnote)" (p.4). He adds that CMC introduces new features of grammar, vocabulary, and spelling, and it brings new words and idioms into the

written language. The linguistic features of the Internet language have been subject to quantitative linguistic descriptive studies conducted by Ko (1996), Yates (1996), Herring (1996) and Baron (2008).

E-discourse is taking new dimensions, mainly in the way students write. Studies in recent years of (Collot & Belmore, 1996; Herring, 1996; Davis & Brewer, 1997; Crystal, 2001; 2006; Thurlow, 2001; Muniandy, 2002; Thurlow & Brown, 2003; MacFadyen, Roche, & Doff, 2004; Pop, 2008; Plester&Wood ,2009; Jonge & Kemp, 2010; Lyddy, Farina, Hanney, Farrell, & Kelly O'Neill, 2014) have shown an explosion of interest in examining the language used by adolescents in the electronic communication.

4. Methodology

This section begins with a brief description of the data and rationale for data selection. Then, it provides some information on how the study participants are classified so as to contextualize the age and gender variables. Finally, it describes the methodological procedures of data processing and the methodology used to identify and analyze stance markers in the data.

4.1 Data

The data comprises 1500 Facebook status update posts written in English by 200 Egyptian male and female undergraduate students as well as 200 male and female academic staff. The whole data is composed of 108,489 words for analysis (see Table 1). Posts are presented in two forms to enable both qualitative and quantitative analyses:

-As images/screenshots of authentic Facebook interactions, for a qualitative analysis of the selected samples, where all the formatting features are present.

-As readable plain text files format to enable corpus analysis. This is attained by converting the posts into plain text format to be fed to the concordance program, the freeware corpus analytic toolkit, AntConc.

Students' posts address general topics including instances that Facebook users have or comments about social experiences. In terms of content, the posts are about social relationships, personal experiences, daily activities, expressing beliefs, personal occasions, sports, birthday wishes and sharing the educational experiences. Posts of academic staff, on the other hand, address diverse topics related to personal opinions, marking exams, personal experiences, expressing gratitude to friends and criticizing others, complaining about negative social practices, birthday wishes, congratulations, giving advice, and expressing feelings and emotions towards people and issues. Totals are tabulated for presenting the four corpora of M(ale)/F(emale) students and M/F academic staff in Table 1:

Table 1
Total Number of Participants and Word Counts

No. of Participants	Total no. of posts	No. of words	Average length of posts
100 FSs	350 status updates (3 statuses for every user)	29135	82
100 MSs	400 status updates (4 statuses for every user)	24221	60
100 FAS	400 status updates (4 updates for every user)	30065	75
100 MAS	350 status updates (3 updates for every user)	25068	71
Total: 400	1500	108,489	

As shown in the above table, gender seems to affect the average length in Ss's posts but not in the AS's. Female students produced longer status updates than male students.

4.2 Rationale for Data Selection

The selected posts are written between the years 2017-2020 and they are written in English. The status updates are selected according to the language they are written in, i.e., English. Thus, posts which are written in Arabic or Franco-Arabic are excluded. Moreover, based on observations, subjects of the present study opted for English in their posts more than Arabic. Furthermore, mixed languages used in posts are also excluded because investigation of codeswitching is beyond the scope of this paper. According to Klimanova (2013), the choice of second language may give Facebook users the possibility to present themselves in a way that is more appealing to the audience they are addressing. Others (Huffaker & Calvert, 2005 and Ruiz, 2009) postulate that the use of the second language rather than the first language may be an act of revolution against local standards and an attempt to interact and engage in recognized second language personalities. Moreover, the selection of English posts facilitates the analysis of the linguistic devices related to age and gender. It also helps in comparing the findings of the present study to the findings of the previous studies conducted on online discourse of English data.

Emara (2017) suggests that the choice of writing a status post in English is intended to reveal the user's identity as a bilingual speaker. It also means that the user expects the status to be encountered by friends of different nationalities. Otherwise, it may reflect the user's intention to

address a selected reader who understands English. The selected posts include status updates that are written on different topics related to the subjects' daily experiences and activities.

4.3 Participants

The participants of the study are Egyptian undergraduate male and female students at Sadat Academy for Management Sciences (to be referred to as SAMS) as well as Egyptian male and female academic staff. The participants are drawn from a specific group of users in the researcher's list of Facebook friends and friends of friends. They are classified into two representative groups:

100 males (to be referred to as MSs) and 100 females (to be referred to as FSs). All of them are undergraduate college students enrolled at SAMS.

100 male academic staff (to be referred to as MAS) and 100 female academic staff (to be referred to as FAS). They are lecturers and teaching assistants in the fields of marketing, business administration, economics, and management.

Being a Facebook friend of participants allows the researcher to track posts by scrolling back through the subjects' "timelines" to gather screenshots of their posts. The researcher also uses the search function available at the top of the site to select status update posts that are written in English. For ethical considerations, the personal information of the participants is cropped for hiding their names and personal profiles' photos and permission is granted to linguistically analyze their Facebook status updates they posted in FB. Then, the corpus is analyzed through the concordancing tool in AntConc. Participants' posts include general social issues, particular political events, general topics (usually situations that Facebook users experience), special occasions, daily activities as well as personal instances or comments about social issues.

4.4 Procedures

The following procedures are used for having a balanced and accurate data processing. First, conscientious reading of the data is accomplished for highlighting the extracts of status updates that are investigated. Second, the lists of engagement markers are taken from previous research studies, specifically Hyland (1998a, 1998b, 2005a, 2005b) as well as from the most frequent features in the corpora.

The engagement markers in Hyland's Model of Interaction (2005a,b) are extracted from the corpus through AntConc (3.5.8), a corpus analysis toolkit for concordance and text analysis. Hyland's list of linguistic markers of engagement features (2005a, b) is used to produce wordlists and concordances of keywords through AntConc. The

frequency of occurrences of engagement features in the corpora are tabulated for the subsequent analysis and interpretation.

Screenshots of a variety of the participants' status update posts are gathered by means of the snipping tool program. For ethical considerations, the personal information of the participants is cropped for hiding their names and personal profiles' photos. Then, the corpus is analyzed through AntConc. The screenshots of posts are first transformed and saved in plain text format, which is the required format for AntConc. In plain text files, all figures, emoticons, symbols, and all quotation marks are removed in order to reduce false hits. Then, the engagement markers are fed into the software to come up with a total frequency count of such markers. Moreover, the engagement markers are examined manually to exclude those that do not meet the criteria that are based on Hyland's model (2005a, b).

In order to provide significant explanation of the results, the relative frequency (R) and normalized density of tokens are calculated. The relative frequency (R) indicates the frequency proportion of the counts in each corpus in relation to the total counts across the four corpora. While the density (D) of tokens indicates their frequency within each single corpus. The relative frequency reflects the individualized behavior of each group of participants (MS, FS, MAS, or FAS) in relation to that of other groups. The density (D) is calculated per each 1000 words, which is a well-established method in previous corpus studies (Biber et al., 1999, Hyland 2005, Semaie et al., 2014 & Youssef, 2016).

To provide the frequency of markers across the sub-corpora, the researcher uses a standardized size of 1000 words. Since the number of posts in each group varies, converting the raw scores into significant figures and calculating the frequency per each 1000 words is as follows: First, the raw frequency of the engagement marker in the identified data is determined. Then, the raw frequency (F) is multiplied by 1000 and the results are divided by the total number of words in the identified part of the data. MS excel is used in generating the graphs that present and summarize the overall view of stance markers across the four participant groups and in calculating total counts, R, and D (see Section 5).

In conclusion, the qualitative and quantitative tools outlined above are applied to the selected corpus. Then, the results of the analysis are investigated in order to draw general conclusions.

5. Analysis

For corpus analysis, the markers are investigated by using the latest version of the software concordance tool AntConc (3.5.8). With regard to

the English status updates, Hyland's (2005a, b) interactional model of engagement strategies is adopted and used for the analysis of engagement markers in status updates. The list of engagement markers provided by Hyland (2005a) is employed as a baseline for the comparison between engagement markers in students' and academic staff writings.

The features analyzed here state how each Facebook user refers to the self and others. The present study attempts to apply Hyland's (2005a, b) model to investigate engagement markers through the analysis of pronouns to investigate the implications of reference to the self and others.

The researcher applies the analysis of engagement markers with the help of AntConc software to answer the research questions. The software AntConc helps the researcher in analyzing the most frequent words in the four corpora in addition to the most repeated word in different forms. The researcher uses four tools: word lists, collocates, concordance, and clusters in the software to investigate the engagement strategies in the four groups.

A. Reader's Pronouns

Engagement devices according to Hyland (2005 a), are markers that explicitly direct readers, either to focus their attention or include them as discourse participants. To examine age and gender differences in the use of engagement markers, the following table illustrates the markers used in every 1000 words in the Facebook status updates across the four participant' groups.

Table 2

Engagement Markers Across the Four Participant Groups

No.	Markers	Facebook Participant groups				Totals
		FSs	MSs	FAS	MAS	
1	you	1299	1023	826	1217	4365
2	your	394	262	259	357	1272
3	Inclusive we	200	340	249	241	1030
4	Inclusive us	57	121	94	72	344
5	Inclusive our	77	89	115	62	343
T		2027	1835	1543	1949	7354
D		69.5	75.7	51.3	77.7	
R %		28 %	24 %	21 %	27 %	
R% Ss vs. AS		52%		48%		
R% Females vs. Males		49%		51%		

As shown in Table 2, The ordering of engagement forms in the table reflects the ascending frequency of their presence in the data, with the pronouns *you* and *your* being the most frequently used, followed by the inclusive *we*. As indicated by the engagement counts of the four groups in the table, FSs are the leading group in the use of engagement markers, followed by MAS, then by both MSs and FAS. The combined total suggests weak gender effects with the male groups resorting to reader engagement (51%) more often than do their female counterparts (49%), regardless of age.

It is noticed that the most direct form of reader engagement is through addressing the reader by using reader pronouns *you*, *your*, as well as inclusive *we*, *us* and *our*, which also function as solidarity markers. In Table 2, gender effects can be observed across four group participants, where male participants combined produced 52% of reader inclusion in their posts. Gender effects are also observed within students group participants, where FSs display 27.5%, males display 25% of reader inclusion. This can be manifested also in academic staff group participants, where MAS display 26.5% of the tokens, females display 21%.

According to the above table, *you* and *your* are commonly used by all Facebook participants, which indicates that they acknowledge the presence of their readers and bring them into their texts explicitly. *You* according to Hyland (2005b) "carries a more encompassing meaning than rhetorically focusing on an individual reader, seeking instead to engage with readers by recruiting them into a world of shared experiences" (p.184). Another marker which is used frequently by all group participants to engage with readers according to the above table, is the inclusive we. According to Hyland (2005b) inclusive *we*: "sends a clear signal of membership by textually constructing both the writer and the reader as participants with similar understanding and goals" (p.183). Females also use first person plural pronouns usually to present their involvement with others and their acknowledgement of social relationships as in the examples below. On the other hand, males mainly use them to make general or sarcastic posts that portray general situations. In the examples below, the participants explicitly address the readers and engage them in their posts. This can be supported by Hyland (2005) who points out that "the most obvious indication of a writer's dialogic awareness occurs when the author overtly refers to audience,

asking questions, making suggestions and directly addressing the audience" (P.186). He adds that engagement markers have a message to obviously declaim readers or bring a bond with them.

Ex. (FS 1) Most people have that concept that **you** sacrifice by **your** wish, and they take it for granted, others see it's a must and ask **you** that shocking question Did I ask you to do that **You** did it by yourself. Above all, it's not the others' mistakes. It's **ours**, that **we** sure expected a return.

In the above example, the participant brings the audience into the discourse and engages them as participants through the use of reader pronouns. Moreover, he makes use of the second person pronouns *you/your* to convey a sense of intimacy and directness to readers.

Ex. (FS 2) **We** no longer have the luxury of time and the privilege of endless emotions to risk.
Ex. (FS 3) **We** tend to overthink everything before **we** start, and it stops **us** from even trying.
 Ex. (FAS 4) when **we** eat, **we** spend time together; **we** talk, laugh, look at the eyes. When **we** eat together i give **you** part of my life and happiness to share them with **you**, so **we** make memories. So, it is as if I'm reminding **you** of the time **we** spend together eating and its meanings that **we** have to keep, save and appreciate.
In the above examples the participants bring readers into their posts and seek to engage them in their claims by directing them in the discourse.
Ex. (MS 5) **We** don't live by facts. **We** all live by vibes, what our hearts try to tell us.
Ex. (MAS 6) **We** make choices, we know people. **We** use our minds to plan our lives. Sometimes people tell **us** something, but **we** cannot feel it will work for **us**.
Ex. (MAS 7) All **we** want to hear is **You**'re a fighter and **you**'ll make it. All **we** expect is people who support **us** until **we** recover. All **we** dream of is a day without pain and fear.
Ex. (MAS 8) **We** choose not randomly each other. **We** meet only those who already exists in **our** subconscious.

The participants in the above examples (5,6,7 and 8) create a greater sense of conversational relationship, intimacy and closeness through the use of inclusive *we* as it signals common understanding, solidarity and mutual goals between writers and readers.

The use of inclusive *we* allow participants to put themselves as a part of a discourse community, and it also manifest audiences as contributors in the interaction within the text. It provides the ability for readers to engage actively in the process of constructing knowledge, examining, and evaluating propositions, and making arguments. In most of the above examples of MSs, FSs, MAS & FAS status update posts about personal experiences, males in both groups describe themselves as powerful, freethinking, and mutinous while females in both groups present desired personalities, they wish they could have. This finding supports the results of the previous studies by Lakoff (1990) and Emara (2017), who conclude that men use language showing power, dominance, and assertiveness, whereas female's language shows tentativeness. According to Lakoff (1990), the inclusive pronoun *we* is "a powerful emotional force, bringing speaker and hearer together as one, united and sharing common interests" (p.191). The inclusive *we* is "warm, friendly and egalitarian" (Lakoff ,1990, 191). Using inclusive expressions join minds together and create a relationship. By using 'expressions of reader address' like *you* and *questions* according to Lakoff, the writers set a more dialogic interaction with their audiences and thus obtain acceptance for their claims.

Ex. (MS 9) To really solve **our** problems, **we** together have to highlight a problem and make different options for all of **us**.

In the example above, the participant uses *we* and *us* to share responsibility with his readers and invites them to share their views with him to solve the problem, and *we* is used by the participant to refer to people in general, as all human beings. In the following examples, participants express their positions in what they write in their posts, and they bring the potential readers into their posts. In addition, they involve their readers in their posts by making use of *reader pronouns* and use *you* to personalize the speech.

In addition to engaging readers in what the four groups of participants declare in their posts through the use of readers' pronouns, they are also engaging the readers by making use of one or more of these engagement markers (including personal asides, appeals to shared knowledge, directives, and questions) in their posts.

B-Personal Asides

Personal asides according to Hylands (2005b) allow writers to address their audiences directly by interrupting the claim to present a view on what has been said. However, it is very challenging to note personal asides in the sub-corpora, as AntConc is not reinforced by an accurate punctuation identifier. This means that AntConc does not identify a comma that would define an interjection. Yet, few examples of personal asides are manually identified as in the following example:

Ex. (FAS 10) Life gets busy, **I am also forgotten to fully pay attention**, and we forget that little things that can bring the most joy.

Asides are recognized as interjection in the above example and as a bracketed phrase in the following example:

Ex. (MAS 11) The people who always think I'm beautiful **(as usual)** I wish it was possible to see the version of you that these people see.

In the above two examples, the participants address their readers directly by interjecting the argument to suggest a comment on what has been said in their posts. This endows the posts with dialogic features.

C-Appeals to Shared Knowledge

Participants resort to use some explicit signals to bring their readers in agreement with themselves. This is constructed using explicit markers of shared knowledge where readers are asked to acknowledge something as being familiar or accepted. The shared knowledge markers investigated in the sub-corpora are very few in participants' group posts as: *of course, obviously*, *as, it is well known commonly* and *by the way*. According to Hyland (2005b), appeals to shared knowledge add more to the writer-reader interaction as in the following examples:

Ex. (FS 12) I'm sad, **of course**, in the hardest moments of life **you** realize who **your** real family are, friends or people who really appreciate **you**.

Ex. (MAS 13) **You must** forgive people because, **it is well known commonly**, you deserve the peace of mind of having no hard feelings towards them.

In example 13, the participant engages the reader strongly in his post by using markers of shared knowledge, *it is well known commonly*, with directive markers through the use of the strong modal of obligation *must*. The participant strongly guides the readers to perceive his views and bring them in agreement with his point of view. In example 14, the participant also invites the reader to share his goals. Besides, the readers' engagement is reinforced through the use of the boosting marker *always* that marks certainty and permits the readers to acknowledge the writer's

view as being accepted through the use of the explicit shared knowledge marker *obviously*.

Ex. (MS 14) **Always**, remember that Silence **obviously**, kills every beautiful thing **you** had with them before.

D- Directives

Directives according to Hyland's (2005b) direct and guide the reader to perform an action or to see things in a way specified by the author. They are indicated mainly through the existence of a reader directives to cognitive acts like *consider, note* and *imagine*; through the use of directives to textual acts like *see, find* and *notice*; through the use of modal of obligation directed to the reader like *must, should,* and *ought*; and through the use of a *predicative adjective* indicating the author's decision of necessity/importance like *it is important to understand*. Reader engagement markers are expressed in the sub-corpora through the use of obligation modals as shown in the examples below but not in a great extent to be analyzed contrastively across the four groups.

Ex. (MS 15) **you must** fight for **your** beliefs, aims, and dreams no matter what it takes.

Ex. (MAS 16) **we should** fight to be what **we think we should** be.

Ex. (MAS 17) **I think you must** stay away from every source of negatives

In example 15, the participant uses *must*, rather than *should*, to involve readers directly into the posts and to bring them into the argument. Hence, a stronger sense of obligation is enhanced, and it is asserted through the use of the boosting marker *think* that is used in examples 16 and 17 respectively.

Ex. (FAS 18) **we should** recognize **our** fears.

Ex. (FS 19) **Definitely**, People are **always** like books, **you should** not have judge them by its cover, **you must** read and understand every chapter.

As we can see in example 18, when directives are combined with reader mention pronouns, they have considerable effect on bringing the reader and the writer together into the discourse, which is a clear indication of a closer relationship and a common understanding. In example 19, the participant combines the boosters *definitely* and *always* with *directives* to stress the importance of her thoughts, to invite the readers to agree with her claim and to engage them in a desired direction.

E- Questions

Another form of reader engagement is the use of *explicit questions* as an engagement feature to invite, address and involve the reader in the

problem posed by the question. According to Hyland (2005 b), questions can be a direct or rhetorical means of inviting the readers and bringing them into a place where they can be led to the participant's opinion. Few *questions* are found as engagement markers in the sub corpora through the use of *direct questions* or through *tag questions* as manifested in the examples below:

Ex. (MS 20) Do **you** know that **you'**re passing through things that could destroy **you** and **you must** take a rest to continue, will they call **you** a loser?

In the above example, the participant provokes interest and encourages readers to investigate a topic with the writer of the post.

Ex. (FAS 21) **Isn't it** so amazing that **our** daily prayers are so inherently intertwined with the world around **us**?

Ex. (FS 22) **we**'ve got **you** 3 ways **you** can hydrate **your** skin for the best summer glow, **which one do you will start with**?

Ex. (MS 23) **What is the value of love if it makes you miserable?**

In the above rhetorical question, the participant presents a view as an interrogative, so the reader seems to be the reviewer without presuming an actual response.

Ex. (FS 24) **Do you truly know who you are?**

In the above examples, the participants expect the possible responses of their readers by involving them in the conflict proposed by asking explicit questions. In example 23, the writer of the post brings the readers as participants, and in example 21, the participant seeks agreement and evokes a response from readers through the use of the tag question *isn't it*. Moreover, in the examples above, the participants bring their readers into a virtual debate although they are not looking for answers from the readers. Evoking an answer from readers through the use of *questions*, often joined with direct indication to them by means of the use of the pronoun *you*, allows participants to structure a more influencing and dialogic discussion as in examples 20 and 24.

It can be concluded that engagement markers are manifested in the sub-corpora, but the above investigated engagement markers like personal asides, appeals to shared knowledge, directives and questions are very infrequent features. These markers are not among the leading strategies in the sub corpora, but they are used quiet rarely and sporadically. They are recurrent, but not to the extent that they can be analyzed contrastively across the four groups of the present study.

It can be manifested also that the most frequent engagement marker that is recognized contrastively across the four groups in the sub-corpora is *reader pronouns*.
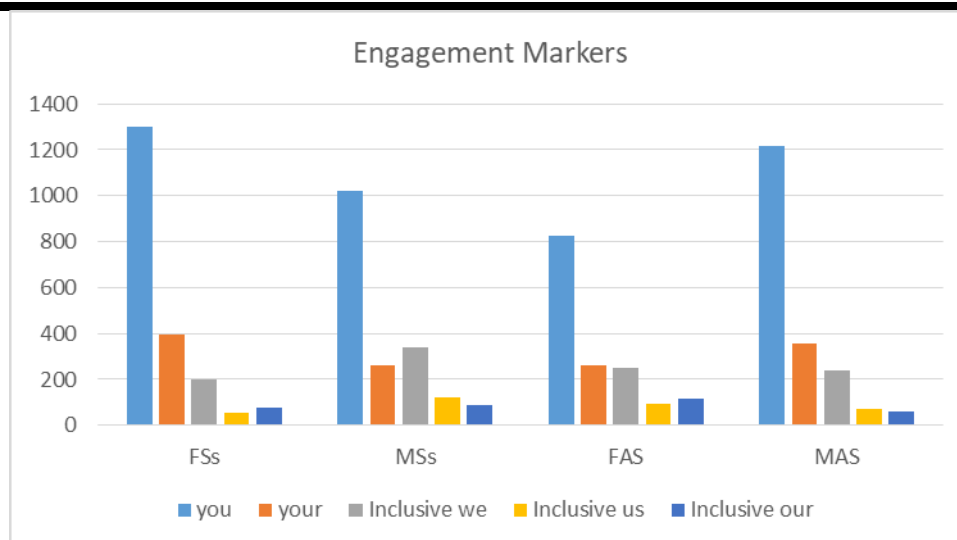
Figure 2

Engagement Markers across all Facebook participant' Groups

6. Findings and Conclusion

The present study presented a corpus-based investigation of the effect of age and gender on the use of engagement markers as per Hyland's (2005a, b) Model of Interaction, in 1500 Facebook status update posts written in English by 200 Egyptian M/F students and 200 M/F academic staff written in English. Weak gender and age effects were observed. As per the first research question, the study has shown how each group of participants managed to engage the reader in their online interactions. The combined total suggested slight age and gender effects with the male groups resorting to all engagement markers (51%) more often than do their male counterparts (49%). As per the second research question, the result of the analysis suggested weak gender effects with regard to the frequency on the way male and female students as well as male and female academic staff acknowledge and brought their readers into their posts. The present study filled a gap in the research on gender effects on online settings. The findings of the present study supported previous research that has been done in the field of gender language differences in both online and offline communication settings in terms of the engagement strategies used by each gender. In terms of the use of engagement markers, female students employed more engagement markers to establish a writer-reader relationship in their posts. These distinctive engagement markers were significant methods of establishing

arguments in interactions. They elucidate relatively conventional ways of making meaning, and they clarify a context for interpretation, showing how writers and readers make connections through texts.

Following Hyland's (2005a,b) model, the results offered a conceivable clarification of the social variation between M/F students and M/F, suggesting how each one of them anticipates and understands his/her readers' background knowledge, interests, and interpersonal prospects to control how they responded to a post and to accomplish the impression they gained of the writer of the post. Finally, Hyland's Model of Interaction has successfully been applied to electronic social media discourse

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