Scientific Research Publishing

Open Journal of Modern Linguistics, 2020, 10, 375-389
https://www.scirp.org/journal/ojml
ISSN Online: 2164-2834
ISSN Print: 2164-2818

Descriptive Analysis of Emoticons/Emoji and Persuasive Digital Language Use in WhatsApp Messages

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How to cite this paper: Ayan, E. (2020). Descriptive Analysis of Emoticons/Emoji and Persuasive Digital Language Use in WhatsApp Messages. *Open Journal of Modern Linguistics, 10,* 375-389.
https://doi.org/10.4236/ojml.2020.104022

Received: May 26, 2020
Accepted: August 25, 2020
Published: August 28, 2020

Abstract

WhatsApp messaging has emerged as one of the major ways that people mostly use for communication purposes in conjunction with fast changes in Internet and computer technologies. Linguistic structures with emoticons/emoji enrich the quality of communication in the environment, which has created a digital language. One of the significant purposes of using such a digital language is obviously to persuade the receiver and send feedback to the sender of the message. On the one hand, persuasive communication is almost indispensable for people who use WhatsApp. On the other hand, persuasion is a real and intentional cognitive process based on preferring certain linguistic style, decision making and providing motivational feedback. In this regard, this work aims at clarifying and exploring persuasive messages with emoticons/emoji based on digital language styles with non-standard writing. The study particularly investigates persuasive digital language used in the WhatsApp messages in terms of the following aspects: 1) languages which are used by the participants in social media platforms, 2) purposes of the participants in using social media platforms, 3) choices of persuasive language by the participants in social media platforms, 4) words that the participants initiate to start persuasive conversations in WhatsApp messages and 5) types of sentences the participants mostly produce in WhatsApp messages. It has been observed that Wh-adverbs (WRB) and Wh-pronouns (WP) are often used in initiation of persuasive language patterns. Female participants more frequently choose emoticons, photos, abbreviations, question/question marks, fiend's names and pictures of the events than male participants do. The participants mostly preferred to use interrogatives during production of persuasive language patterns in WhatsApp messages.

Keywords

Emoticons/Emoji, Persuasive Language, WhatsApp, Digital Language

1. WhatsApp and Digital Language

Social media environments (like WhatsApp, Facebook, Snapchat, Skype, etc.) have appeared as major tools that people mostly use for communication purposes in conjunction with fast changes in Internet and computer technologies. In accordance with that, new varieties of language have appeared in e-mails, chat-groups, blogs or web sites (Crystal, 2006). These electronic materials created via smart phones and computer-mediated communication environments support both meaning and form in spoken languages, which may comparatively be regarded as less rich in terms of quality in natural language that people enjoy during their daily face-to-face conversations. However, linguistic structures without certain syntax, various spelling types and use of symbols and emoticons/emoji enrich the quality of communication in the environment, which has created a digital language.

WhatsApp is one of the leading tools that most of the students prefer to enjoy for communication (Price, 2015). According to a research by Deshmukh (2015) there are more than 750 million users of the tool and increases 20 million every month worldwide. More than 18% of the users are mostly students and between the ages of 17 to 25. The tool enables people to communicate via instant text messages including symbols and images, recording audios and videos, copying-pasting and telephony functions. It is also useful to send different electronic media such as audio and video files/recordings, documents (.doc, .pdf, etc.), web links, location markers, etc.

Language produced through WhatsApp messages can be regarded as a particular linguistic style. One of the significant purposes of using such a digital language is obviously to persuade the receiver and send feedback to the sender of the message. On the one hand, persuasive communication is almost indispensable for people who use WhatsApp. On the other hand, persuasion is a real and intentional cognitive process based on preferring certain linguistic style, decision making and providing motivational feedback. WhatsApp messages are not totally genre specific texts with certain language structures. The messages may include different typography and orthography, which are not very common in formal texts. However, the languages, created via WhatsApp messages, play an important role in conveying meaning to the users. Therefore, digital language with non-standard spellings used in WhatsApp messages deserves a closer look in terms of the analysis of persuasive language, which is often of different elements from natural discourses.

In this regard, this paper aims at clarifying and exploring persuasive messages

based on digital language styles with non-standard writing. The study particularly investigates persuasive digital language enjoyed in the WhatsApp messages compiled in a micro WhatsApp corpus. An initial section provides a brief review of literature on digital language used in digital environments, persuasive language use in text messages and cognitive corpus linguistics as a method frequently enjoyed in the field. Second section is going to mention the hypothesis and research questions. Methodology of the research will be clarified in the third section. Fourth section will be on primary findings. Discussion will take place in the fourth section and conclusion will be followed in the last section.

2. Close Look at the Related Literature

Digital language, and particularly chat language as called by Hinnenkamp (2008) is regarded as a hybrid form, combining "stylistic features of both writing and speaking" since Internet users mostly tend to use non-standard spelling while producing instant messages (Deumert, 2014). The hybrid form is a particular linguistic style composed of logographic (e.g. "smiles: 😁😁"), phonographic (e.g. "acronym: Where is the wg party???) or both (e.g. smilies and acronym: I'm sorry guys for the kneipe but promise you for the best party mid November! C W H 😎) writing systems in the messages. As Blankenship and Craig (2011) assert, "Linguistic styles [as well as lexical diversity, implicit causality, abstract or concrete language, linguistic intergroup bias and indirectness] may activate a particular category (e.g. social power) or stereotype (e.g. credible sources), that may influence perceptions of the communicator and amount of persuasion" (p. 198). For example, tag questions used in the text messages may negatively affect the level of persuasion (Blankenship & Craig, 2011). During the production process of the messages, the users should make several decisions: 1) how/when/where to use a linguistic form, 2) how/when/where to spell the linguistic form, c) how/when/where to support/enrich the linguistic form with non-standard spelling types. On the one hand, sense of immediacy reportedly plays an important role in the production process of the messages. On the other hand, there appears certain difference between genders in terms of using "politeness markers and supportive conversational styles" (Deumert, 2014: p. 105).

There are studies on digital language produced by human beings in computerized environments such as emails, web sites, chat platforms, etc. For example, the study by Kochetova and Volodchenkova (2015) focuses on evaluative adjectives used in digital job advertisements in order to persuade applicants. A research by Golonka, Tare, and Bonilla (2017) evaluates text messages produced by learners of Russian in terms of content of language used by the participants. Another work by Hinnenkamp (2008) is on chat language, which is collaboratively constructed in chat rooms by Turkish immigrants living in Germany. Furthermore, Yan, Dillard and Shen (2012) describe the effects of emotions (e.g. happiness, anger, and fear) are closely linked to the content of persuasive messages.

WhatsApp provides an environment transferring instant and direct messages,

which highly promote engagements by means of chat groups. Engagements and interactions are from person to person or from person to members in a social context. Producing persuasive messages via WhatsApp seems one of the major cognitive processes for the people. Persuasion contexts may have multiple roles to play like changing tendencies, attitudes and opinions (Blankenship & Craig, 2011; Greenwald, 1968; Love & Greenwald, 1978; Wood, 2000). According to Greenwald (1968) persuasive messages in public and face-to-face communications contributes a lot to acquisition of cognitive learning model of persuasion since the early ages of a person. Regardless of language styles employed in the instant messages, it is a particular process of meaning making through specific and purposeful choice of words and symbols/icons. Senders of the messages may spend unique effort in order to find out linguistic structures, styles and strategies while encoding persuasive messages. Receivers of the messages also spend effort in order to decipher the meaning and request, which requires another decision making process to accept the new opinion and respond instantly.

Potential discourse strategies become more evident in textual features of the messages. While shaping the lexical content for structured genres like job advertisements, formal emails or legal forms, users of the platform should obey instructions given regarding style, content and intended recipients. However, text messaging via WhatsApp is free of such limitations as long as the user is not in a conversation with a stranger or legal person. Text and context go hand in hand in both cases, though. When a user of the tool knows what kind of interests and needs members of the group have got, it becomes easier for him/her to determine linguistic structures which are more interesting and informative for the others. For example, Naomi Baron (2008) emphasizes that "people […] no longer care whether they spell correctly; they write on the fly, with little attention to grammar, word choice and punctuation" (as cited in Deumert, 2014: p. 101).

3. Research Questions

It is apparent that users of computerized communication tools may tend to use different linguistic styles depending on their purposes. Linguistic structures without certain syntax, various spelling types and/but full of symbols and emoticons/emoji may be a way of strategy of persuasion, which has created a persuasive digital language. The researcher hypothesizes that members of the WhatsApp group may produce particular linguistic styles for persuasive purposes in a particular language (e.g. English in this context) while creating text messages, which is still an untouched issue in the literature. Therefore, language produced through WhatsApp messages can be regarded as a particular linguistic style. In this sense, following research questions are listed below.

1) What languages are more frequently used by the participants in social media platforms?

2) What type of purposes do the participants have in using social media platforms?

3) What are choices of persuasive language by the participants in social media platforms?

4) What are frequently used types of words that the participants initiate to start persuasive conversations in WhatsApp messages?

5) Which type(s) of sentences (a) declarative, (b) interrogative, or (c) imperative do the participants mostly employ during production of persuasive language patterns in WhatsApp messages?

4. Methodology and Materials

Corpus-based content analysis was mainly used in the present study. The researcher took advantage of the methodology in order explore certain discourse structures enjoyed by the group members. The research data for this research was collected via two medium: 1) an online questionnaire, titled Persuasive Language Use in Social Media Platforms, which was created via Google Forms and 2) a small scale WhatsApp corpus compiled from the WhatsApp messages of the participants. The questionnaire was composed of three sections: 1) profiles of the group members, 2) frequency of participation in social media platforms, devices and preference of language in the platforms, 3) purposes of social media use and persuasive language choice. The participants were required to fill in the questionnaire either via a device like computer, smart phone or tablet, which has Internet access. A WhatsApp corpus was created after conversations were compiled and tagged according to a standard tagging system developed by The Stanford Natural Language Processing Group (2018).

4.1. Participants

Participants of the study were international exchange students who were enrolled at different faculties and institutions at Philipps University Marburg. Age range of the participants (Mean for Females = 22.29 and Mean for Males = 26.31) was between 19 and 33. More than half of the participants were bachelor (N = 24) and master students (N = 13) and studying in different fields (N = 22).

The participants were of different country of origin (N = 22) and native languages (N = 19). There was only one bilingual participant. The level of English language knowledge of the participants was apparently better than German knowledge since the participant had at least B1 level of English knowledge even though most of them had only A1 (N = 12) or A2 (N = 5) level of German knowledge. More than half of the students (N = 15) were planning to stay in host university for at least one semester (almost six months). The participants informed that almost all of them owned smart phones (N = 29) or laptop computers (N = 27). Internet access was available for most of the participants either at home/dormitory or at school.

4.2. Procedures, Data Collection and Limitations

A WhatsApp group was created for the international students in September, 2017.

Purposes of the group were basically to share any information about meetings, university life, daily problems encountered and provide help for each other when necessary. Members of the group actively used the platform in order to communicate and built up intentional and meaningful conversations, which are frequently based on certain persuasive language styles. The collection process of WhatsApp messages shared in the group started in September 2017 and continued until mid March, 2018. All the data by the group members were anonymised and personal details such as telephone and identity numbers were excluded. Social media platforms are restricted to well known ones (N = 12) in the questionnaire sheet and WhatsApp messaging was not specified in order to compare tendencies of the participants in terms of using language styles. Analysis of the messages was only limited to initial conversation triggers/questions and responses to the triggers, and random messages were disregarded. Age, gender, level of grade, level of language knowledge, origin of country, type of study field were not defined as dependent variables in analysis of WhatsApp conversations via a concordancer, *AntConc*.

4.3. Creating a Small Scale WhatsApp Corpus

The conversations among the group members were extracted as a .csv file. A small scale tagged corpus was created. Stanford tagging standards were used in tagging process of the corpus (Toutanova, Klein, Manning, & Singer, 2003; Toutanova & Manning, 2000). But the standard tags did not cover non-standard text language use and different media like emoticons, images, records and web links. Therefore, further tags were formulated for these usages such as ABBR = abbreviation (e.g. fb (Facebook), RB (Regional Express) etc.), APO = apocopation (e.g. cuz (because)), CAP = capitalization (e.g. YEAH), DEC = declarative sentence, EMO = emoticon (e.g. :), 😎), IC = icon (e.g. €), IMP = imperative sentence, INI = initialism/interjection (e.g. omg, LOL), INT = interrogative sentence LOC = location (e.g. google map location marker (http://maps.google.com)), MED = media (e.g. images, videos and audios), MEMO = multiple emoticons (e.g. 😎😎😎😎), REC = records, RED = reduplication (e.g. !!!), REL = repetition of letters/lengthening (e.g. Yeee, Wooow, etc.), MOD = modifications (e.g. "Niid job!" "Nice*"), OMI = omission (e.g. thnx (thanks), ur (your)), ONO = onomatopeia (e.g. hahahaha, yeah, etc.), WEBL = web link (e.g. http://...).

4.4. Data Analysis

Data from the questionnaire were analyzed via JASP (version: 0.8.5.1) (JASP Team, 2018), a statistical analysis software. Statistics descriptives and frequencies were created and evaluated. Only conversations between group members were covered in data analysis and corpus creation process and other messages sharing mere information were excluded. Also, images and audio records were excluded in the data-set. *AntConc* (Version 3.5.6) was employed in order to visualize corpus data and create word lists (Anthony, 2018).

5. Findings

40 members of WhatsApp group responded to the questionnaire. Findings from the questionnaire provided significant indicators dealing with the use of social media platforms, electronic devices, language choice and purposes in using platforms and persuasive language. The participants produced more than 1600 speech bubbles which included 10,674 words and 57,459 characters in the WhatsApp group. The conversations among the group members were mostly composed of invitations to meetings, asking for specific information about the city and places of entertainment. The findings are evaluated in details below in accordance with the research questions mentioned earlier.

5.1. Social Media Platforms Used and Preference of Electronic Devices

The participants clarified that frequencies of usage of social media platforms were not the same for all given platforms and genders. Namely, WhatsApp (F = 42%, M = 30%), YouTube (F = 42.1%, M = 20%), Instagram (F = 21.1%, M = 30%) Facebook (F = 26.3%, M = 10%), were comparatively leading platforms among the participants who visited the platforms at least an hour a day. However, Twitter, Pinterest, Google+, LinkedIn, Tumblr, Flicker, SnapChat and Reddit were not frequently used. Also, smart-phones (e.g. WhatsApp = 94.7% for Females and 90% for Males) were primary devices which were almost used for all social media platforms even though laptop computers were more frequently preferred for YouTube.

English language was enjoyed as a main communication language almost all the time in different social media platforms. It was illustrated that when compared to Facebook and other social media platforms, preference of native language in WhatsApp was more frequent (F = 52.6%, M = 40%).

It was not surprising that there were various purposes of the participants in using social media platforms such as informing their friends about events, courses, etc. However, most of the participants (F = 89.5% and M = 50%) expressed that they always used social media platforms to communicate with their friends and family members.

5.2. Using of Persuasive Digital Language in Social Media Platforms

The participants preferred different methods and contents in order to enrich their persuasive language. For example, the participants informed that they "sometimes" used videos and voiced messages to attract attention of the group members. It was also determined that female participants more frequently chose emoticons, photos, abbreviations, question/question marks, fiend's names and pictures of the events than male participants did (See Table 1).

The messages sent by the participants were not in a neutral position and/but intended to encourage people to participate in certain events, like meetings, travels,

Table 1. Frequencies for persuasive language choice in social media platforms.

Statements	Gender	Frequency	*f*	%
I use "videos" to call for attention of the other people.	Female	Always	2	8.3
		Often	1	4.2
		Sometimes	10	41.7
		Rarely	5	20.8
		Never	6	25.0
	Male	Always	1	6.3
		Often	2	12.5
		Sometimes	3	18.8
		Rarely	4	25.0
		Never	6	37.5
I use "voiced messages" to call for attention of the other people.	Female	Always	2	8.3
		Often	5	20.8
		Sometimes	5	20.8
		Rarely	6	25.0
		Never	6	25.0
	Male	Always	2	12.5
		Often	1	6.3
		Sometimes	4	25.0
		Rarely	3	18.8
		Never	6	37.5
I use "emoji" (such as : (, :), etc.) to call for attention of the other people.	Female	Always	10	41.7
		Often	3	12.5
		Sometimes	7	29.2
		Rarely	1	4.2
		Never	3	12.5
	Male	Always	3	18.8
		Often	4	25.0
		Sometimes	5	31.3
		Rarely	2	12.5
		Never	2	12.5
I use "photos" to call for attention of the other people.	Female	Always	6	31.6
		Often	6	31.6
		Sometimes	6	31.6
		Rarely	1	5.3
		Never	0	0.0
	Male	Always	2	20.0
		Often	2	20.0
		Sometimes	3	30.0
		Rarely	3	30.0
		Never	0	0.0

Continued

I use "abbreviations" (such as LOL, BTW, etc.) to call for attention of the other people.	Female	Always	2	10.5
		Often	5	26.3
		Sometimes	4	21.1
		Rarely	3	15.8
		Never	5	26.3
	Male	Always	1	10.0
		Often	1	10.0
		Sometimes	3	30.0
		Rarely	4	40.0
		Never	1	10.0
I use "names of the activities" (meetings, parties, etc.) to call for attention of the other people.	Female	Always	3	15.8
		Often	2	10.5
		Sometimes	7	36.8
		Rarely	6	31.6
		Never	1	5.3
	Male	Always	1	10.0
		Often	2	20.0
		Sometimes	3	30.0
		Rarely	3	30.0
		Never	1	10.0
I use "questions or question marks" to call for attention of the other people.	Female	Always	3	15.8
		Often	5	26.3
		Sometimes	4	21.1
		Rarely	2	10.5
		Never	5	26.3
	Male	Always	3	30.0
		Often	4	40.0
		Sometimes	1	10.0
		Rarely	0	0.0
		Never	2	20.0
I pay attention to use my "friends' names" while commenting on the social media shares.	Female	Always	5	26.3
		Often	4	21.1
		Sometimes	3	15.8
		Rarely	5	26.3
		Never	2	10.5
	Male	Always	2	20.0
		Often	4	40.0
		Sometimes	2	20.0
		Rarely	0	0.0
		Never	2	20.0

Continued

I use "pictures of the events" to call for attention of the other people.	Female	Always	4	21.1
		Often	5	26.3
		Sometimes	3	15.8
		Rarely	7	36.8
		Never	0	0.0
	Male	Always	1	10.0
		Often	3	30.0
		Sometimes	1	10.0
		Rarely	2	20.0
		Never	3	30.0
I use my "native language" to call for attention of the other people.	Female	Always	4	21.1
		Often	4	21.1
		Sometimes	7	36.8
		Rarely	3	15.8
		Never	1	5.3
	Male	Always	0	0.0
		Often	3	30.0
		Sometimes	5	50.0
		Rarely	1	10.0
		Never	1	10.0
I use "special characters" ($, £, €) to call for attention of the other people.	Female	Always	0	0.0
		Often	3	15.8
		Sometimes	5	26.3
		Rarely	4	21.1
		Never	7	36.8
	Male	Always	0	0.0
		Often	3	30.0
		Sometimes	0	0.0
		Rarely	1	10.0
		Never	6	60.0

etc. It was explored that digital language as a linguistic style has an effect on persuasion process in the WhatsApp messages produced by the group members. Certain members of the group appeared to use definite construction of digital language with emoticons and abbreviations. Namely, emoticons seemed to be strategic persuasive patterns to mediate persuasion process and present motivational basis for receivers of the message in public contexts. Capitalization of words were sometimes ignored (e.g. Might I ask what kind?) in initial messages. Creating prosody by means of repeated punctuation marks was also common. It was observed that the participants interacted mostly through invitation and information sharing as well as reasoning for certain conditions and asking for opinion. Responsive contributions (e.g. feedback channeling like "Yeah, Great idea,

etc.") to initial text messages were highly encouraging in terms of representing the number of group members who wanted to participate in the events.

The frequently used types of words that the participants employed to start persuasive conversations in WhatsApp messages in the messages were nouns (NN), personal pronouns (PRP), verbs (VBP), adjectives (JJ), coordinating conjunctions (CC) and gerund or present participle (VBG). Emoticons (EMO), onomatopoeia (ONO) and reduplication of punctuation marks (RED) were also very common in the text messages (See Table 2).

It was also found that Wh-adverbs (WRB) and Wh-pronouns (WP) were often used in initiation of persuasive language patterns. Moreover frequency of interrogative sentences was relatively higher than other sentence types. Therefore, it can be argued that the participants preferred mostly to use interrogatives during production of persuasive language patterns in WhatsApp messages (See Table 3).

Table 2. Frequency of parts of speech tags.

Tags	Samples	*f*
NN	Anybody_NN for_IN mensa_NN lunch_NN around_IN 1:30_CD ?_.	701
PRP	I_PRP am_VBP in_IN !	431
VBP	I_PRP have_VBP a_DT portable_JJ speaker_NN	218
JJ	Me_PRP but_CC o_NN have_VBP german_JJ class_NN	207
EMO	When_WRB and_CC from_IN where_WRB ?_. :)_EMO	140
CC	I_PRP went_VBD there_RB and_CC are_VBP only_RB	135
VBG	Anyone_NN is_VBZ going_VBG out_RP tonight_NN ?_.	90
WRB	[Name]_NNP where_WRB is_VBZ the_DT this_DT club_NN ?_.	59
ONO	Yeah_ONO I_PRP 'm_VBP there_RB now_RB maybe_RB	57
WP	Who_WP 's_VBZ in_IN for_IN Lasertag_NNP tomorrow_NN ?_.	56
RED	Great_JJ !!_RED	46
MEMO	Snooooooowwww_REL ❤❤❤_MEMO	33
OMI	send_VB them_PRP a_DT msg_OMI on_IN fb_ABBR maybe_RB ._RED	14
REL	Yeeeoooo_REL	13

Table 3. Frequency of types of sentences.

Sentence Types	Samples	*f*
Interrogative	INT_Someone_NN to_TO the_DT party_NN ?_. INT_Anyone_NN in_IN the_DT city_NN tonight_NN ?_. INT_Who_WP 's_VBZ in_IN ?_. INT_How_WRB much_JJ is_VBZ it_PRP ?_. INT_Whos_NNS coming_VBG ??_RED 🏇🏇👥_MEMO	155
Declarative	DEC_I_PRP 'm_VBP in_IN DEC_Me_PRP too_RB !_. DEC_Me_PRP too_RB !_. 😎_EMO	55
Imperative	IMP_Use_VB a_DT knife_NN IMP_Come_VB to_TO my_PRP$ kitchen_NN 😘_EMO IMP_Come_VBN on_IN ..._RED	17

6. Discussion

Corpus linguistics has been accepted as one of the fundamental methods for cognitive linguistics, which may be called as cognitive corpus linguistics, even though there are still on going debates about generalization and representativeness of corpora studies as main sources of data (Arppe, Gilquin, Glynn, Hilpert, & Zeschel, 2010). For example, Arppe et al. (2010) suggest that "While richly annotated corpus data are thus well-suited to investigate linguistic variation that is conditioned by structural, social, or textual factors, questions pertaining to the (linguistic component of) cognition of individual speakers need to be carefully operationalized if we want to analyze them on the basis of off-line data from corpora" (pp. 3-4). Corpus methodology has been accepted as a leading method for many researchers who want to conduct research on online online conversations and content (Ahangar & Zeynali Dastuyi, 2017; Kochetova & Volodchenkova, 2015; Schnoebelen, 2012). Basically, corpus based methodologies may provide meaningful outputs in order to figure out how cognitive processes and language preference are actualized by users of WhatsApp even though activation and representation of forms and meanings may change a lot in online environments when compared to real life situations. There are several projects focusing on collecting WhatsApp messaging. One of the recent studies on analysis of Facebook posts and WhatsApp chats was conducted by Verheijen and Stoop in 2016 (Verheijen & Stoop, 2016) in the Netherlands. A social media corpus was built up in Dutch for linguistic analyses (i.e. orthography, syntax and lexis) by the researchers. There were several promising results of the study in terms of sociolinguistic perspectives. Namely, standardized definitions of the language preferences and textisms with letters, diacritics, punctuation, spacing and capitalization such as clipping, phonetic respelling, single letter, etc. were clarified and exemplified in terms of gender and age of the participants. Another research project is known as "What's up, Deutschland?" started by Eva Wyss in 2014 in Germany. In her interview dealing with the project, Eva L. Wyss (2015) emphasized using emoticons has effects on emotional side of human beings. She said that "[…] by emoticons everyone can make a message, which is perhaps not very clear, clearer, that is, ambiguous. In addition, one can easily bring humor into a communication, which contributes to the uplifting of the general mood". Also, she mentioned that "The messages can be quite short, but often there is still something like a stress factor. If you look at the distribution of the bubbles, you can see that there is a tendency to split the messages into several smaller bubbles and thus spread on the monitor".

Messaging via WhatsApp is more than informational communication and/but rather seems as persuasion processing. Greenwald (1968) define three components of persuasion situations as setting, source and communication content, but nowadays content of the messages shared via WhatsApp are not only sound or text based but also additionally rich in non-standard writing with emojis/emoticons. Obviously, private persuasion strategies are mostly employed by the participants

of the current study in public context. Initial messages in interrogative forms are treated as stimuli and follow up imperatives are motivational triggers (see conversation below).

***M*12:** *INT_Who_WP's_VBZ in_IN for_IN Lasertag_NNP tomorrow_NN*?_.
[*Name*]_*NNP*,_, [*Name*]_*NNP*,_, [*Name*]_*NNP*,_, [*Name*]_*NNP*
***M*12:** *IMP_Add_VB yourself_PRP guys_NNS*
***M*47:** *ok_UH*
***M*2:** *DEC_I_PRP'm_VBP in_IN*

Regarding several studies conducted concerning digital job advertisements (Kochetova & Volodchenkova, 2015), text messages (Golonka, Tare, & Bonilla, 2017; Hinnenkamp, 2008), twitter tweets (Schnoebelen, 2012) results of the current study explored that the participants mostly tended to use a particular persuasive language. For instance, the study by Kochetova and Volodchenkova (2015) reveals that the employers tend to present evaluative adjectives referring to emotions of potential applicants. Golonka, Tare, and Bonilla (2017) find out that learners of Russian frequently tend to negotiate for meaning and use their partners to clarify and elicit information and provide help for unknown words. Hinnenkamp's (2008) research emphasizes "linguistic commitment[s] […] as the construction of commitments around cultural forms and practices" in text messages are important elements to mention. In addition, Schnoebelen (2012) exemplifies that emoticons are not only representation of emotional states but also have "variants that have greater or lesser affinities to standard language" (p. 116). However, results of the current study reveal that interrogative sentences with WH-questions in order to persuade other members of the group are major elements of persuasive language. Regarding all studies mentioned, it can be anticipated that linguistic styles employed by users of computerized communication tools highly depend on the computerized environments such as emails and chat groups, which means there appear intentional cognitive processes per se to choose appropriate digital languages to persuade people.

Emoticons function as more than facial expressions in the messages but as positioning opinions and feedback by the receivers. Schnoebelen (2012) claims that "emoticons are preserving part of what happens in actual speech" (p. 117). Triggers of persuasive language and reproduction of the same trigger in German and Spanish, which are followed by contextual emoticon(s) (e.g. M33: Who would like to play football tomorrow after lunch? M33: *Willst du mit mir fußbal spielen*?, M33: *Quieres jugar futbol conmigo*?) are regarded as significant resources to provide motivational assistance for all members. The follow-up questions like "*Who's in*?" responses (e.g. *I am in. Me too*!) to the trigger questions obviously play an important role to persuade other group members and provide unique encouragements. It can also be argued that such persuasive elements of language used in the group address to intentional collaborative interactions to attract people's attention and encourage them to participate in the events.

7. Conclusion

Purpose of the current study was to define and describe how users of the WhatsApp group employ linguistic structures in order to persuade and encourage each other to get involved in online conversations. The linguistic features of persuasive language were explored and documented via descriptive and corpus based detection methodologies. A detailed questionnaire, focusing on profiles, participation in social media platforms, purposes of social media use and persuasive language choice, was employed as a data collection tool. A micro WhatsApp corpus was compiled in order to analyze WhatsApp messages. International exchange students enrolled at Philipps University Marburg, Germany, participated in the study. The participants produced more than 1600 speech bubbles which included 10,674 words and 57,459 characters in the WhatsApp group. English appeared as a main communication language in different social media platforms but preference of native language in WhatsApp was also frequent. In addition, the results of the study may contribute a lot to the methodologies used earlier by the researchers and the researchers working on corpus linguistics can be more familiar with linguistic features of persuasive language styles used by the participants.

Acknowledgements

I hereby thank international students who voluntarily participated in this research and valuable feedback by Dr. Barbara Güldenring & Assoc. Prof. Dr. Elif Tokdemir Demirel.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

Ahangar, A. A., & Zeynali Dastuyi, S. (2017). Persuasive Language in the Subgenre of Persian Sales E-Mails. *Language & Communication, 53,* 69-86. https://doi.org/10.1016/j.langcom.2016.08.010

Anthony, L. (2018). *AntConc (Version 3.5.6) [Computer Software]*. Tokyo, Japan: Waseda University. http://www.laurenceanthony.net/software

Arppe, A., Gilquin, G., Glynn, D., Hilpert, M., & Zeschel, A. (2010). Cognitive Corpus Linguistics: Five Points of Debate on Current Theory and Methodology. *Corpora, 5,* 1-27. https://doi.org/10.3366/cor.2010.0001

Blankenship, K. L., & Craig, T. Y. (2011). Language Use and Persuasion: Multiple Roles for Linguistic Styles. *Social and Personality Psychology Compass, 5,* 194-205. https://doi.org/10.1111/j.1751-9004.2011.00344.x

Crystal, D. (2006). *Language and the Internet*. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511487002

Deshmukh, S. (2015). Analysis of WhatsApp Users and Its Usage Worldwide. *International Journal of Scientific and Research Publications, 5,* 1-3.

Deumert, A. (2014). *Sociolinguistics and Mobile Communication* (1st ed.). Edinburgh: Edinburgh University Press.

Golonka, E. M., Tare, M., & Bonilla, C. (2017). Peer Interaction in Text Chat: Qualitative Analysis of Chat Transcripts. *Language Learning & Technology, 21,* 157-178.

Greenwald, A. G. (1968). Cognitive Learning, Cognitive Response to Persuasion, and Attitude Change. In A. G. Greenwald, T. C. Brock, & T. M. Ostrom (Eds.), *Psychological Foundations of Attitudes* (pp. 147-170). New York: Academic Press Inc. https://doi.org/10.1016/B978-1-4832-3071-9.50012-X

Hinnenkamp, V. (2008). Deutsch, Doyc or Doitsch? Chatters as Languagers—The Case of a German-Turkish Chat Room. *International Journal of Multilingualism, 5,* 253-275. https://doi.org/10.1080/14790710802390228

JASP Team (2018). *JASP (Version 0.8.6) [Computer Software].*

Kochetova, L. A., & Volodchenkova, O. I. (2015). Evaluative Language in English Job Advertisements in Diachronic Perspective. *Review of European Studies, 7,* 292-302. https://doi.org/10.5539/res.v7n11p292

Love, R. E., & Greenwald, A. G. (1978). Cognitive Responses to Persuasion as Mediators of Opinion Change. *The Journal of Social Psychology, 104,* 231-241. https://doi.org/10.1080/00224545.1978.9924065

Price, R. (2015). *Texting Is In Decline*. http://uk.businessinsider.com/whatsapp-vs-texting-statistics-2015-1

Schnoebelen, T. (2012). Do You Smile with Your Nose? Stylistic Variation in Twitter Emoticons. *University of Pennsylvania Working Papers in Linguistics, 18,* Article 14. https://repository.upenn.edu/cgi/viewcontent.cgi?article=1242&context=pwpl

The Stanford Natural Language Processing Group (2018). https://nlp.stanford.edu/software/tagger.shtml

Toutanova, K., & Manning, C. D. (2000). Enriching the Knowledge Sources Used in a Maximum Entropy Part-of-Speech Tagger. In *Proceedings of the 2000 Joint SIGDAT Conference on Empirical Methods in Natural Language Processing and Very Large Corpora: Held in Conjunction with the 38th Annual Meeting of the Association for Computational Linguistics* (Vol. 13, pp. 63-70). Stroudsburg, PA: Association for Computational Linguistics. https://doi.org/10.3115/1117794.1117802

Toutanova, K., Klein, D., Manning, C. D., & Singer, Y. (2003). Feature-Rich Part-of-Speech Tagging with a Cyclic Dependency Network. In *Proceedings of the 2003 Conference of the North American Chapter of the Association for Computational Linguistics on Human Language Technology* (Vol. 1, pp. 173-180). Stroudsburg, PA: Association for Computational Linguistics. https://doi.org/10.3115/1073445.1073478

Verheijen, L., & Stoop, W. (2016). Collecting Facebook Posts and WhatsApp Chats. In P. Sojka, A. Horák, I. Kopeček, & K. Pala (Eds.), *Text, Speech, and Dialogue* (pp. 249-258). Cham: Springer. https://doi.org/10.1007/978-3-319-45510-5_29

Wood, W. (2000). Attitude Change: Persuasion and Social Influence. *Annual Review of Psychology, 51,* 539-570. https://doi.org/10.1146/annurev.psych.51.1.539

Wyss, E. L. (2015). *Forschungsprojekt "What's up, Deutschland?": "Präsent sein für das Gegenüber" (M. Hübner, Interviewer) [SWR].*

Yan, C., Dillard, J. P., & Shen, F. (2012). Emotion, Motivation, and the Persuasive Effects of Message Framing. *Journal of Communication, 62,* 682-700. https://doi.org/10.1111/j.1460-2466.2012.01655.x